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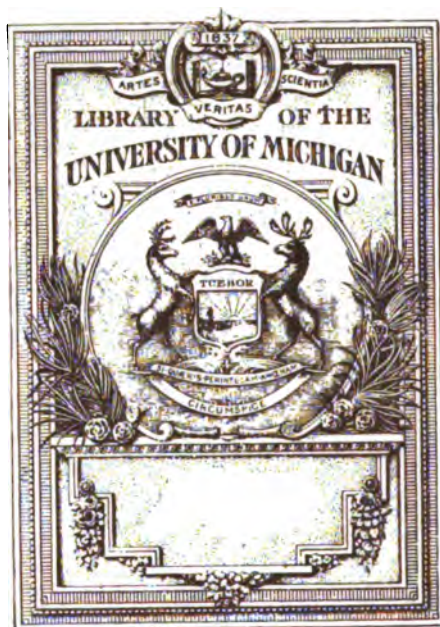
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FIFTEENTH ANNUAL REPORT

OF THE

DAIRY AND FOOD COMMISSIONER

OF THE

STATE OF MICHIGAN

FOR THE

YEAR ENDING JUNE 30, 1908



BY AUTHORITY

LANSING, MICHIGAN
WYNKOOP HALLENBECK CRAWFORD COMPANY, STATE PRINTERS
1909

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MICHIGAN DAIRY AND FOOD DEPARTMENT.

| | |
|--------------------------------|---------------------|
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| COLON C. LILLIE, B. S..... | Deputy Commissioner |
| FLOYD W. ROBISON, B. S..... | State Analyst |
| M. J. SMITH..... | Chief Clerk |
| MISS IDA M. HARRIS..... | Clerk |
| HENRY W. KIEKINTVELD..... | Clerk |
| OSMOND C. HOWE..... | Clerk |
| FRED S. DUNKS..... | Clerk |
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| CHAS. H. DEAR..... | Regular Inspector |
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| R. G. BRUMM..... | Special Inspector |
| J. B. BARRON..... | Special Inspector |



LETTER OF TRANSMITTAL.

OFFICE OF DAIRY AND FOOD COMMISSIONER,
LANSING, MICHIGAN, JUNE 30, 1908.

To His Excellency, Fred M. Warner, Governor of Michigan:

Sir:—I have the honor to submit my annual report as Dairy and Food Commissioner for the year ending June thirtieth, 1908. During the year beginning July 1, 1906, and ending June 30, 1907, the total expenses of the Dairy and Food Department were \$42,330.40, covered by a legislative appropriation of \$35,000, together with \$7,330.40 received in fees collected from the registration of creameries, licensing of commercial feeding stuffs, etc. During the year beginning July 1, 1907, and ending June 30, 1908, the total expenses were \$43,228.15, being covered by a legislative appropriation of \$35,000, together with \$8,228.15 received in license fees as in the previous year. This appropriation has permitted of the employment, beside the regular office and laboratory force, of seven food inspectors and four dairy inspectors. This fund has also been drawn upon to pay the salaries of two additional laboratory assistants whose services have been required because of the extra work sent in to the laboratory.

The rapid growth of this Department is shown from the fact that when I became its administrative head, January 15, 1905, the laboratory work was done entirely by the State Analyst without any assistance, his salary being \$1,500. At the present time the increased laboratory work of the Department makes necessary aside from the State Analyst, the employment of four regular assistants throughout the entire year. The expense of maintenance of the laboratory for salaries alone is now \$5,200 per year. The expenses for laboratory equipment and other maintenance have likewise increased.

As a result of our investigations continued during the last two summers, regarding especially the sanitary quality of the milk supplied in the cities, it seems imperative that the dairy inspection force should be increased by at least two men to be employed continually on city milk inspection.

During the last few years, a great demand has sprung up for State supervision of the quality of seeds offered for sale. It is very evident from a hurried examination at different times of the clover seeds, timothy seeds, etc., on the market, that it is desirable that some systematic inspection of these products should be made.

It is likewise exceedingly desirable that a law be passed requiring an examination of paints on the market. Other states having such laws are

Ohio, North Dakota, Wisconsin, Vermont, and a few others. It has been found that the inspection of paints is of material benefit to contractors and others who use large quantities of paint, also to farmers and to the larger manufacturers who are putting out paints of extra quality and among whom there is considerable competition. A paint law and a seed inspection law might be made self sustaining, it seems to me, in the same way as our present law on the sale of commercial feeding stuffs.

The scientific departments of the State are of sufficient importance now that some provision should be made to supply them with reference literature in the State Library. The State of Michigan has an excellently equipped law library, but for any of the scientific departments, there is not a single valuable reference work. This equipment should include all of the modern and more valuable magazines, both in our language and in the foreign languages. This might involve an expenditure of \$1,000 per year to keep this feature in working order and to buy up from time to time the back numbers of the more important scientific magazines for use in reference work.

From the numerous inquiries that have been received from the heads of the various State institutions, together with data obtained from a systematic inspection of these various institutions, it is very apparent that an enormous curbing of expense could be accomplished in the matter of supplies for these State institutions, if some system could be developed whereby their respective heads could call upon the Department laboratory to establish specifications based on the needs of each particular institution for the various products, food, fuel, etc., which they need. The different supplies purchased would then be obtained of different manufacturing and jobbing concerns submitting the lowest bids for the goods specified. On the arrival of these goods, and previous to payment for same, if samples could be obtained by a regular, authorized inspector and submitted to the Department laboratory for examination, a proper scientific and economical basis of payment could be maintained, and there is absolutely no doubt but a great deal of money could be saved to the State in this manner. I venture to say that there is no one move that has been contemplated in recent years that means such a saving of money to the State as this one move alone. For example, to emphasize more clearly this statement, we find that several institutions are purchasing say vanilla extract from various sources. This extract is anything but uniform in quality or price and ranges in the various institutions all the way from \$4 to \$12 per gallon. Purchased according to proper specifications, this product could be more or less uniform and the enormous profit gained by the manufacturer could be avoided. Baking powder is another such item, varying in cost from ten to forty cents per pound, an entire lack of uniformity in either quality and price. These two items are but examples of hundreds of different items that should be controlled in which the various State institutions are concerned. Among the more important ones are syrup, teas, coffees, flour, meats, spices, soaps, coal, clothing, etc.

To avoid duplication of expensive apparatus, as well as to secure a higher standard of efficiency in operation, it is highly desirable that the scientific laboratory work of the State, at least so far as police measures are concerned, should be centered as completely as possible in one central laboratory. By so doing, the apparatus that is available in

one department would be available to the other departments likewise. An excellent example of the working of this idea is shown by the present organization of the Dairy and Food Department. In some states, the dairy work is entirely separated from the food work, which involves a well equipped dairy laboratory as well as a well equipped food laboratory, bringing two separate, completely equipped laboratories under the jurisdiction of the State. This cannot be done without an enormous outlay of money spent in the duplication of apparatus, because at least 80% of the apparatus required in a dairy laboratory is a duplicate of the apparatus required in a food laboratory. The same would apply to almost any other class of work which is submitted to a laboratory. By combining the laboratory forces in this way, not only would it be more economical from an apparatus standpoint, but it would be more economical from an employee standpoint, and at the same time much more efficient. It would permit of the employment of the services of experts in the various branches, the services of whom would be available in any branch of work that might come under the jurisdiction of the State. If a certain branch of State government desired the services of the chemist, that chemist is available. If another department desired the services of a microscopist, the microscopist is available. If another department required the services of a bacteriologist, the bacteriologist is available, and because they are all combined in one State laboratory, the money that otherwise would be spent in duplication of apparatus and in the employment of extra help could be spent in paying expert men a sufficient salary to make their employment possible.

I therefore recommend that appeal be made to the Legislature to grant the following:

- 1—The employment of two dairy inspectors to be engaged continually in the work of city milk inspection;

- 2—The passage of a seed inspection law;

- 3—The passage of a paint inspection law;

- 4—The establishment of a contracts laboratory to examine the supplies for the various State institutions and to prepare detailed specifications, in conjunction with the heads of these institutions, for each item of consumption;

- 5—The equipment of the State Library with a scientific reference department; and

- 6—That should the near future provide any new inspection departments of any description whereby a scientific laboratory is required, the ends of efficiency and economy will both be conserved by connecting it in some way with the laboratory that is now already established and in successful working condition.

In addition to the above there is a well defined demand among the druggists of the State, both wholesale and retail, that Michigan shall immediately take the advanced step that many other states have already taken toward adequate inspection and supervision of the sale of drugs. The Department is in position to take up this work at any time so far as laboratory equipment is concerned and the added expense of such a division to the work would be small with the exception of making provision for the requisite number of inspectors and probably one more laboratory assistant.

The Michigan food law in general is considered to be one of the best

of the State laws. Because of this, any attempt toward a general revision of this law or toward its repeal, instituting in its stead a new law, would seem to me to be very unwise at the present time. Almost every feature of the Michigan law has been before the supreme court and declared constitutional. It would be many years before any other law could in its every provision be put to this test.

I do not mean from the above that the Michigan food law should not be further amended. This law at the present time contains no provision for the regulation of the manufacture and sale of ice cream. It contains no provision for a standard for cream. It contains no adequate provision against misbranding. It contains no provision requiring the name of the manufacturer of all food products to be placed upon the containing package. Its provisions regulating chemical preservatives are not satisfactory. Carefully considered amendments covering the above subjects should be recommended to the Legislature.

During the past year the Department has successfully prosecuted 24 cases of food adulterations. The most notable of these is what is known as the Armour Sausage Case in which Armour and Company in conjunction with other meat packers sought restraining orders from the courts to prevent the Department from interfering with the sale of sausage containing cereal and added water. This case has been won by the Department in two courts and an appeal taken by Armour and Company is now pending in the supreme court. This case is being watched carefully by the state food departments of the entire country. The amount involved to the consumers of this class of food products reaches hundreds of thousands of dollars annually and the final opinion by the Michigan supreme court of the questions involved will largely determine the action of all other states with reference to similar products.

The Pierre Viaus Syrup case, taken through all of the courts has made it possible for the Department to remove from sale throughout the State all so-called mixed and blended maple syrups unless the manufacturer thereof shall state plainly upon the label the percentages of other ingredients used.

The Association of State and National Food and Dairy Departments on invitation of this Department held its annual convention at Mackinac Island the present year. The results of bringing together within the State the food experts of the entire country have given a great impetus to the work of the Department and have done much toward interesting our people as to the necessity of examining carefully the labeling of foods which they purchase for use upon their tables. When the public generally understands that with the exception of those foods which are positively injurious to the human system and which because of this can be prohibited from sale, the only assistance which the State can render toward the prevention of fraud is to require an adequate statement upon the label, and that said label becomes a sufficient notice only when the general public reads and understands it, a great advancement will have been made in the successful administration of food law. In other words, the State can only go to the point of adequate notification on the label and the purchasing public must do the rest.

All of which is respectfully submitted.

A. C. BIRD,
State Dairy and Food Commissioner.

**STATE OF MICHIGAN—THE CIRCUIT COURT FOR THE
COUNTY OF INGHAM, IN CHANCERY.**

Armour & Company,

v.

**Arthur C. Bird, Dairy and
Food Commissioner, et al.**

OPINION.

The bill in this case is filed by Armour and Company, to restrain the Dairy and Food Commissioner of the State of Michigan and his deputies from threatening retail meat dealers in Michigan with prosecution if they sell sausage containing cereal.

The case is of importance, for it involves the business practices of a great packing concern, the duties of an administrative department of the State government under the pure food law, and the rights of consumers of sausage in the State.

Complainant makes out of this State, and markets in the State, many varieties of sausage, and its products are retailed by residents of this State, over butcher counters to consumers.

The bill alleges that, in making the sausage sold in this State, complainant uses from one to ten per cent of cereal, and the proof shows that water is also added to the product.

It is claimed by complainant that the use of cereal is legitimate and demanded by the consumers, that it improves the appearance of the product, makes it keep better, distributes and holds the juices and moisture of the meat so that when it is fried it is more juicy and palatable than sausage without cereal, and does not injure or detract from its value as a food product.

Complainant contends it is lawful to use cereal in sausage, that the Michigan Pure Food Law does not prohibit it and the Commissioner is wrong in holding its use a violation of the law, and contends also that even if its use is in violation of the law the Commissioner has gone beyond his official duty in threatening complainants' patrons, and he should be stopped by the order of this court from threatening dealers of sausage with cereal with prosecution if they do not desist from selling the same.

The Michigan Pure Food Law in question was passed in 1895, and provides:

"That no person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food which is adulterated within the meaning of this act.

"The term food, as used herein, shall include all articles used for food or drink, or intended to be eaten or drank by man, whether simple, mixed or compound.

"An article shall be deemed to be adulterated within the meaning of this act: First, If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; Second, If any inferior or cheaper substance or substances have been substituted wholly or in part for it; Third, If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; Fourth, If it is an imitation of, or sold under the name of another article; Fifth, If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal; Sixth, If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; Seventh, If it contains any added substance or ingredient which is poisonous or injurious to health: Provided, That nothing in this act shall prevent the coloring of pure butter: And provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definition fourth and seventh of this section."

The title of the act is:

"An Act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink."

Complainants' sausage having cereal and added water, has substances mixed with it which lower its quality, strength and purity as a meat product, cereal and water are substituted in part for meat, it is an imitation of an all-meat sausage and sold under the name of sausage, which means an all-meat product, it is made to appear better and of greater value than it really is; that is, the cereal and added water in the sausage cannot be detected by ordinary vision and the article appears to be an all-meat sausage when in truth and in fact it is not all-meat, but is meat, flour and added water.

Cereal is used to cheapen the cost of making the product, to substitute flour for meat, it absorbs and holds large quantities of water and it acts as a binder and permits the use of cheap grades of meat and improves the appearance of such meats when used, making them appear better than they are, and it increases the profits.

The power of the Legislature to enact pure food laws and define what shall constitute adulteration is beyond question.

Pure food laws are intended to protect the consumer, and not the least protection intended is against fraud and deception.

The public welfare, that is to guard against cheats, frauds and deception and thereby promote honesty, has always been and always should be one of the ends of good government.

Has the Commissioner misconstrued his powers, and unjustly, or in violation of complainants' rights, condemned a practice resorted to by it in the making of sausage?

He has threatened to prosecute dealers selling sausage containing cereal if they do not desist.

The Commissioner is but a creature of the law; he has no plenary powers, and like complainant and all others he must keep within the law.

The power of the Commissioner rests upon the statute and the statute being specific in its provisions, leaves him no room for official discretion.

The statute defines with particularity what constitutes an adulteration of food products and creates an official to see that its provisions are enforced.

What is meant by pure food?

The statute answers this by defining adulteration.

It was evidently the intention of the legislature, regardless of all existing definitions of adulteration, to define in the law itself what constitutes adulteration of food products in this State.

It may be of interest, however, to examine into the definition of adulteration outside of the legislative definition.

"The term adulteration is derived from the Latin, adultero, which in its various inflections signifies to defile, to debase, to corrupt, to sophisticate, to falsify, to counterfeit, etc.

"The objects of adulteration are four fold, namely, to increase the bulk or weight of the article, to improve its appearance, to give it a false strength or to rob it of its most valuable constituent.

"All of these adulterations are manifestly of a designedly fraudulent character, and therefore properly the subject of judicial inquiry."

Com. v. Curry, 4 Penn. Superior Court, Rep. 360.

The legislative definition therefore does not differ from the well-established meaning of the term adulteration when applied to an article of food.

The Federal law defines adulteration substantially like ours, and under that law all makers of sausage for inter-state sale, if cereal is used in the product are required to plainly mark the same, showing it to be sausage with cereal.

The police power of the Federal government within its limits is no greater than that of the State government within its limits. In its regulation of inter-state trade the Federal government has required sausage with cereal to be marked and this must be because of the fact that the cereal in it is an adulteration.

In its regulation of health, the promotion of honesty and the pre-

vention of deception, the State government requires sausage with cereal to be sold as such and not as pure sausage, because the use of cereal is an adulteration of a food product, a product requiring no cereal and to which cereal has been added to improve its appearance, lessen its cost to produce and increase the profits, all at the expense of the consumer, if sold as pure sausage and made possible because of the secrecy with which the practice has been carried on.

The purpose of a plain, sensible law ought not to be defeated by over nice definitions, or by effort at forced refinement until common sense is read out of the law.

The Legislature evidently had in mind something subtle by way of deceit in the making and sale of food products, and to avoid hair-splitting efforts to fritter away the safeguard they intended, they defined adulteration, and their definition is my law.

But it is said that the pure food law, so far as it applies to the maker of a food product, is to be considered in this case from the commercial standpoint of sausage, and that no matter what sausage may have been formerly, yet if at the time of the passage of this act in 1895, commercial sausage then had and had had for some time cereal in its makeup, the legislative body is conclusively presumed to have known of that fact, and under the law as it is passed, the use of cereal in commercial sausage cannot be declared to be an adulteration of a food product.

Members of the Legislature are drawn from the people by popular choice, and intended to represent fairly the intelligence of the communities from whence they come. I cannot clothe them with powers of discernment beyond that of citizens of average intelligence. To hold that when they passed the law of 1895 they knew commercial sausage contained flour and added water and therefore the courts must except sausage from their definition of adulteration, would charge them with light upon the subject apparently possessed by none of their constituents and beyond the knowledge of most all lexicographers and with knowledge of the trade practice complainant is now so strenuously objecting to having publicly revealed.

Sausage is a well-known article of food, and it has commonly been understood to be a meat product and not a mixture of meat and cereal. It derived its name from its makers at a time when it was a home-made product and before it became a commercial product.

The packers of this country found sausage to be a common article of food and they made it for the trade and sold it under the name everyone understood. The consumers and the customers of the packers not so very many years ago made it themselves and therefore know how to make it.

To profit out of the name and the common understanding of the consumers, some of the commercial makers of sausage have retained the name because of the demand for that particular article of food, but they have changed the makeup of the product.

I cannot hold that it must be assumed the Legislature had in mind when this act was passed commercial practices in the making of this food product and not the way everyone not in the secret supposed it was made, and that by a failure to specifically mention and condemn

this article, the definition adopted by the Legislature must not be made to apply to commercial practices.

If the Legislature is assumed to have had information upon the subject of what constitutes sausage, then under the evidence in this case it is sensible to hold that the knowledge possessed by the Legislative body was the knowledge possessed by the people themselves, and not knowledge possessed by a few who were endeavoring to keep the matter secret.

Had the members of the Legislature gone to the dictionaries they would have found sausage defined to be chopped or minced meat, seasoned, and this definition would have been supported by the understanding of practically all of their constituents.

"The Legislature intended that any particular product which differs from that which has hitherto been known under a certain name in being less valuable by reason of the abstraction of some ingredient, shall not be sold under that name. It must be given some name which will carry warning with it, which will prevent the public from being imposed upon."

Charge of Court in *Com. v. Hunfal*, 4 Penn. Sup. Court, 310.

"In construing legislative language, it must be received not necessarily according to its etymological meaning, but according to its popular acceptance, and especially in the sense in which the Legislature is accustomed to use the same words."

"It is the duty of the courts so to construe statutes as to meet the mischief and to advance the remedy, and not to violate fundamental principles; to bring sense out of the words used and not to bring a sense into them, to give the words a reasonable construction."

"The sense given to particular words by our great lexicographers is always entitled to weight, yet where a word is general and common, due regard must be had to the circumstances. The term 'skimmed-milk' is not a technical one, and must be presumed to have been used in its known and common sense."

Com. v. Hufnal.

By the means used in its making of sausage, the complainant in effect makes it possible to practice a fraud on the consumers in delivering to retail dealers for sale by them a cheaper article than its name imports, and this fraud, if permitted, in time must drive the honest dealer who will not stoop to the practice from the market.

Common knowledge has given sausage certain attributes, and everyone supposes he is informed upon what sausage is made of, but while it has been pretty thoroughly slandered, it has not been understood by the consumers to be a corn flour product to any extent.

Chopped meat, corn flour and water, seasoned with spices is probably as healthy as a pure sausage such as was known to the fathers and may be sold under its proper designation, but it cannot be passed over the counter and sold as sausage.

The trouble is not with the use of cereal in sausage, but the trouble

is that the Commissioner holds the seller must inform the customer at the retail counter that cereal is there, and therefore they are paying the price of meat for it.

The health properties of complainant's sausage with cereal and water may in the opinion of some be superior to an all meat product, but this does not help, for the Legislature intended that sales of all articles of food for use by man should be so marked and sold, as to not leave in doubt questions affecting their strength, quality or purity, and to prohibit sales being made under a name, the use of which makes the article appear better or of greater value than it really is. It is claimed that to compel commercial sausage to be truthfully labeled would result in the confiscation of complainant's business in this state, and be in violation of the 14th amendment to the Federal constitution.

This constitutional provision does not protect manufacturers at the expense of the people, neither does it interfere with the police power of the State Legislature in the promotion of the public health, the fostering of honesty and the prevention of deception.

If an article of food cannot be sold for what it is, but must be sold under another name in order to get people to buy it, and if the result of a law requiring the truth to be told is in violation of the constitution, then the constitutional provision means something different than has always been understood. But the amendment means no such thing.

"The 14th amendment of the constitution was not designed to interfere with the exercise of the police power by the State for the protection of health, the prevention of fraud and the preservation of the public morals."

Powell v. Penn., 127 U. S. 678.

The police power is one of regulation, having the public interests and the most complete enjoyment of rights by all. What right has complainant to add cereal and water to seasoned chopped meat and sell it for pure sausage?

It contends in effect that sausage has not been pure for years, and the practice of using cereal and water must now be considered lawful.

It is lawful to use cereal and water in sausage, but it is not lawful to sell it as pure sausage. The law recognizes the right of complainant to make any healthful food product it wants to and to sell it anywhere, but the law does not recognize the right to use a name to conceal a fraud.

The law must consider the public interests and the most complete enjoyment of rights by all, and therefore while it permits one man to make sausage as he pleases so long as he employs nothing harmful to health, yet it does not, and ought not, to permit him to sell it under a name for the purpose of working a fraud upon the purchaser.

The complainant cannot complain if the law lets it do as it pleases short of practicing deceit. It has no right to insist that the State leave it to individuals to discover its practices and refuse its products.

The State has seen fit to intervene between complainants practice and its consummation, and this the State has a right to do and in the interests of good government ought to do.

The Attorney General claims that all dictionaries define sausage to

be a product consisting of meat and seasoning and that flour is nowhere mentioned. In this he is in error, but his error is excusable for it has taken much search to find any definition other than he claims. The exception to the general definition is so obscure and unrecognized by authority, and the common one so in accord with the common understanding that there need to be no difficulty in determining what sausage should be in fact.

The consumer understands that sausage is chopped or minced meat seasoned, but complainant says such a person does not know and is not in a position to know what sausage is.

It is probable he does not know what complainant's sausage is, and this very ignorance on his part makes it possible for complainant to add cereal and water to chopped or minced meat and sell it to him in the belief on his part that he knows what he is getting.

It was said at the hearing that chopped meat seasoned described Hamburg steak and not sausage. It used to describe sausage, and will again if the pure food law is enforced. It does not describe the sausage made by complainant because it leaves out the filler of cereal and water.

The complainant claims there is a difference between commercial sausage and sausage known as such by the consumers. It is partly right.

There is a difference between commercial sausage as made by complainant and sausage, and this is the very thing the Commissioner insists the people have a right to know, and with such knowledge buy it or not as they see fit.

It was claimed at the hearing that people prefer sausage with cereal in it. If that is true, then complainant ought to welcome defendant's effort in behalf of publicity of the use of cereal, and not ask the court to restrain him in his effort to compel sellers to let buyers know what they are getting when they buy sausage.

The testimony of many sausage makers in this and other states has been submitted to the court, and the practice of using cereal in commercial sausage seems to be widespread, but not commonly known to the consumers of sausage.

Potato flour and bread crumbs have been used in some parts of Germany for many years, and the practice was brought to this country to some extent probably half a century ago, and has grown until lately it has become quite a factor in the making of commercial sausage.

I do not understand that a practice, even though it had been resorted to for many years, can fail to fall within the provisions of a law intended to prevent deception.

It is not now understood commonly, and certainly was not when the act of 1895 was passed, that manufacturers of sausage used cereal, in fact one of the complaints made by complainant is that defendant has injured its business in Michigan, by reason of his threats, and the publicity given to complainant's use of cereal in the making of sausage.

It is claimed by complainant that sausage is a mixture or compound, and falls therefore within the proviso of the pure food act and cannot be declared adulterated if it contains cereal and added water.

To call an adulterated article a mixture or compound and exempt it from the law under the proviso would open a way for the escape of

all long practiced adulterations, and render the whole law a cover for adulteration, rather than a truth telling attempt at exposure.

The United States Department of Agriculture, Bureau of Animal Industry, on September 12, 1906, in a pamphlet concerning trade labels under the Federal Meat Inspection Law and regulations, gave voice to some of the tentative rulings of the Pure Food Commission under the pure food law and under the head of mixtures and compounds stated:

"Mixtures and Compounds: Mixtures, when the name plainly indicates a mixture, such as sausage, hash, mince, etc., need not be marked 'Compound.' Other mixtures not so indicated by their names must be marked 'Compound.'"

But it is significant that sausage is defined in the same pamphlet as follows:

"Sausages and Chopped Meats: The word 'Sausage' without a prefix indicating the species of animal is considered to be a mixture of minced or chopped meats, with or without spices. If any species of animal is indicated, as 'Pork Sausage,' the sausage must be wholly made from the meat of that species. If any flour or other cereal is used, the label must so state. If any other meat product is added the label must so state; for example, 'Pork and Beef Sausage,' 'Pork, Beef and Flour' (or other cereal) or 'Pork and Beef Sausage, Cereal Added.'"

And at the conclusion is found this: "Manufacturers are warned that the above rulings do not exempt them from the enforcement of State Laws."

Having in mind our statute, I shall hold that sausage does not fall within the proviso under the head of a mixture or compound.

I quote with approval the language of the Attorney General's department of the State of Pennsylvania in Stephens & Widlar, 5th Penn. Dist. Rep., p. 104:

To Hon. Levi Wells, Dairy and Food Commissioner:

Your communication of recent date, enclosing letter of Stephens & Widlar, of Cleveland, Ohio, asking whether certain labels submitted to your department are sufficient to protect them in the sale of coffee as a compound, which contains chickory, rye, wheat, peas and other cereals or products, under the proviso to section 3 of the act of June 26th, 1895, P. L. 317, has been received.

The question involved is one of great importance in the construction of the provisions of the pure food law. As I am informed, the above named firm imports teas, coffees, and spices, and in order to make a cheaper grade of coffee, a certain amount of chickory, wheat, rye, peas, etc., is dried, browned and ground with pure coffee. The mixture thus prepared is sold on the market under a label "Best Rio," "Prime Rio," "French Rio," or "Broken Java." It is earnestly contended that the proviso to section 3 of the act above referred to gives them the right to sell such a mixture or compound without incurring the penalties of the law. Acting upon this idea, certain labels, containing the words "Coffee Compound," and showing that it is a mixture of

prime coffee, English chickory and choice grain, are exhibited for the purpose of securing your approval, so that this "Coffee Compound" may be sold in our State without interference from those in charge of the enforcement of this law.

I have no hesitancy in saying that, if such a preparation can be sold under the law as coffee, the label is sufficient under the proviso above named. But I am of the opinion that the proviso does not cover an article of food known as "Coffee Compound" such as is intended to be sold by this firm, and that any manufacture for sale, offering for sale, or selling of the same as an article of food, would be a violation of the very letter and spirit of the act referred to.

Section 3 of the Pure Food Law defines what an adulteration is within the meaning of the act of assembly. Any article of food shall be considered adulterated:

"1. If any substance or substances have been mixed with it so as to lower or depreciate or injuriously affect its quality, strength or purity. 2. If any inferior or cheaper substance or substances have been substituted, wholly or in part, for it. 3. If any valuable or necessary constituent or ingredient has been, wholly or in part, abstracted from it." These are but three of the seven kinds of adulterations named in the act. Either one of these three definitions is sufficient to brand the "Coffee Compound" offered for sale by the above named firm, as an adulteration. The addition of chickory, wheat, rye, or peas to coffee, depreciates its "quality, strength and purity." It is the substitution, in part, of a cheaper substance, to take the place of coffee, and it could very properly be said that in such a compound, a valuable constituent has been in part abstracted, for part of the coffee is taken away, and a cereal substituted therefor. If the "quality, strength or purity" of coffee can be thus depreciated under the authority of the proviso to section 3 of the above act, then is the pure food law a legislative dream. If this can be done, then any adulterated article could be sold by simply marking it a compound or mixture. Allspice, ground with buckwheat hulls or cinnamon with hemlock bark would then be labeled "Compound," and sold in the open markets as such. Such a construction would render the act of 1895 a nullity.

The pure food law was intended to provide against the adulteration of articles of food and to prevent deception and fraud in the sale thereof. The legislation was much needed, and it should be enforced in such a way as to give the greatest security to the public consistent with the requirements of the act. It is true that the proviso to section 3, above mentioned, says, that "It shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food." It is difficult to give any general definition of an "ordinary article of food" that would apply in all cases. It is, however, a fair presumption that no article of food, adulterated within the meaning of the definitions of section 3, is intended to be exempted by the proviso. The proviso is designed to cover a different class of cases. Anyone relying upon the proviso to exempt him from the penalties of

the law, takes upon himself the laboring oar, and the burden of proof is upon him to make out the exemption claimed. That it is an "ordinary article of food" within the meaning of the proviso, must depend upon the facts in each particular case. I am clearly of opinion, however, that coffee, adulterated by the addition of chickory, wheat, rye or peas, is not an "ordinary article of food," intended to be exempted from the penalties of the law. On the other hand, it is an adulteration and cannot be sold without offending against the provisions of the pure food law.

The pure food law of Pennsylvania and under consideration by the Attorney General, so far as it defines adulteration, was like ours.

If it is not an adulteration under our law to add from one to ten per cent of cereal and all the water it will take up to sausage and call it and sell it for pure sausage, then the practice does not fall within the law at all and as much cereal and water may be added as the conscience of the maker will permit and an all-meat sausage will be a thing of the past.

The term sausage means an all-meat product, and does not describe cereal and water, and everyone, the manufacturers included, know this, and the common understanding of the consumers as to what sausage is, has led the makers to retain the name, and a desire for profit has led to the use of cereal and added water.

It is claimed that cereal is not added to sausage for the purpose of making it a cheaper product of manufacture, but is added to improve the appearance; the sausage is more easily put in the casings and to hold the juices of the meat and make the same more palatable.

I don't care what the purpose is, if the result is in violation of our pure food law. I am not examining now into the purpose, but if the result of the practice is a deception upon the public, and leads them to pay the price of a genuine article for an article that is less in value because of the addition of cereal to it, then that practice must stop.

Complainant can and does make sausage without cereal. Cereal cheapens the product. It permits water to be added.

Armour & Company buy corn flour in carload lots at about three cents per pound. Its annual output of sausage is from thirty-five to forty million pounds. It has about one thousand customers in Michigan and markets here about one million pounds of sausage annually. From two to ten per cent of cereal is used in making this sausage.

One Michigan sausage maker paid four cents per pound for binder and used six pounds of it and fifteen pounds of water to one hundred pounds of meat, so that for twenty-four cents he was able to increase his one hundred pounds of meat to 121 pounds of sausage. That this increases the profit and the consumer gets some water and binder instead of all meat and pays the price of all meat for it, goes without saying.

Another Michigan sausage maker very frankly said that he used flour to absorb water. One witness makes from eight to ten million pounds of sausage per year, using from four to five per cent of flour and about eight per cent of water. It follows that from twelve to thirteen per cent of the product is flour and water, or in other words, about one pound in every eight is not meat at all.

It is claimed that water must be added to sausage in its making. It is undoubtedly true that the moisture in meat will evaporate both by exposure and chopping of it into sausage and it is proper to add water to the chopped meat to bring it to the proper consistency for stuffing it into the casings, but to add flour because of flour's water absorbing capacity produces an article falling squarely within the prohibition of the Michigan Pure Food Law.

A binder cannot be used without adding water. The natural moisture in the meat will not permit the use of a binder, but water must be added, and in advertising some of the binders its chief recommendation to the purchaser is its power to absorb and hold water.

Cereal and all other binders are cheaper than meat, but the water, of course, is cheaper than cereal but when they are mixed they are sold to the consumer as meat.

The law against the adulteration of food products came because of adulteration, and can be and should be so applied that its ends and purposes become effective.

Adulteration existing at the time of its passage was not sanctioned, but its continuance forbidden.

Is it possible that a practice of adulteration under a name implying no adulteration may be carried on so long that it rises superior to the law and becomes sanctified, no matter how much of a cheat and deception it has proven?

I, for one, cannot accede to any such doctrine for the law is not so powerless that it cannot stop practices calculated to cheat and deceive.

A commercial food product may or may not come within the law condemning adulteration. If it is a new product under an old name and the new ingredients foreign to the old product are added to cheapen its production, and the old name is retained to cover the cheat, then it is an adulteration. If it is a new product with a new name, then it is distinctive in character and cannot be considered an adulteration because it is as it always has been from its inception.

There was a time when sausage did not contain cereal. Some of it does not now. When cereal was added it was an adulteration in fact, if not in law, and now it is an adulteration in fact and in law.

The purpose of cereal and added water is to cheapen the product. Sausage can be made without cereal by complainant and all others. If the name is that given to a new product then the product is to be proved and the name is of but little consequence except it be calculated to deceive, but if the name itself is descriptive of a well known and common article of food, then the article must keep to the name and its makeup and if there is a change in its makeup so that the same is deceptive rather than descriptive, the thing is adulterated, and that is what our pure food law means.

The Federal law requires complainant in the sale of its sausage containing cereal to stamp each package sold as sausage with cereal. The relations then between complainant and its patrons are carried on with full knowledge of the use of cereal in the sausage.

The Federal Law, however, has nothing whatever to do with our pure food law. It stops where it ought to, our law begins where it ought, and requires the local seller to impart to the local buyer the fact that he is not getting an all-meat product.

No local dealer has asked this court to restrain the Food Commissioner from requiring notice of an adulteration of sausage to be given consumers, but many local dealers are interested in the success of complainant in this suit, because complainant has informed them that if they sell sausage with cereal in Michigan, it will stand by them and fight the matter of their rights out in the court.

This is the fight.

The complainant makes about one hundred forty varieties of sausage, some differing in seasoning only, while others bear no resemblance to pork, bologna or frankfurter sausage.

Some of the sausage made for a particular trade contains a large percentage of cereal, and undoubtedly those who want it understand its makeup.

This opinion might well be limited to the common sausages known as pork, bologna and frankfurters, because the proof shows the acts of the servants of the defendant complained of relate to the sale of such sausages and not to a cereal sausage made for a small number of people who undoubtedly know what they are getting.

It is contended that the court should restrain the defendant from threatening dealers with prosecution under the Pure Food Law because under the law the Commissioner has no such power delegated to him, but is limited to bringing prosecutions in cases of violations.

The complainant in this case in its bill has stated it makes and sells in Michigan an adulterated article of food, and I am not disposed to stop the Commissioner or anyone else from warning people in this State that it is a violation of the Pure Food Laws of the State to sell sausage containing cereal and added water.

The bill is dismissed.

HOWARD WIEST,
Circuit Judge.

THE CIRCUIT COURT FOR THE COUNTY OF BERRIEN, IN CHANCERY.

The Circuit Court for the County of Berrien, in Chancery.

Armour & Company, Complainant,

vs.

Arthur C. Bird, Defendant.

Motion to dissolve Injunction.

OPINION.

The complainant as appears by the Bill of Complaint is a corporation located at Chicago, whose business is the manufacture and sale of fresh and cured meats, sausages and other meat products. The defendant is

the State Dairy and Food Commissioner of this State, an officer having control of one of the departments of the State Government.

The Bill of Complaint is quite voluminous and I do not think it is necessary to set forth all the allegations of the Bill. A brief synopsis of the gravamen and general nature of the allegations is sufficient.

The Bill in substance alleges the following facts: The defendant designing to injure the business and good name of the complainant has caused it to be advertised that sausages sold by complainant in this State were adulterated within the meaning of the pure food laws of this State. The defendant has notified different merchants that these sausages contained cereals and substances which lowered or depreciated or injuriously affected their quality, strength or purity and that inferior or cheaper substances have been substituted wholly or in part with such sausage. The defendant has threatened to prosecute dealers for selling the sausage products of the complainant, if they continue to sell them, and has sent circulars to dealers so warning them. The complainant has carried on in this State for many years a large and profitable business in the sale of its sausages in this State, and has a large number of regular patrons and customers therein who are engaged in the business of selling these sausages. The complainant manufactures and sells about fifty different kinds of sausages.

The Bill of Complaint alleges that these sausages are manufactured from beef and pork; that spices are used for seasoning and that from one to ten per cent of wholesome cereals or ground grain is also used; that no other ingredients are used; and that the meats and materials of which said sausages are composed are absolutely pure. The wholesome, genuine and lawful character of these sausages has never been questioned by any dealer, consumer or official until questioned by the Dairy and Food Commissioner of this State. The Bill further alleges the following facts: Wholesome cereal is a customary and essential ingredient of sausages manufactured for sale in this and foreign countries. The cereals so used do not injuriously affect the quality, strength or purity of the sausage, and no inferior or cheaper substance has been substituted wholly or in part for said sausages.

The defendant has publicly declared to the people of the State of Michigan, as well as to dealers, that it was unlawful to sell in this State, sausages containing cereal and has threatened to prosecute such dealers if they sold these manufactured by complainant. The complainant has thereby been injured in a sum largely in excess of \$20,000.00 and if the defendant is not restrained from making said threats of prosecution and said statements concerning the meat products of the complainant, the business of the complainant in this State will be totally destroyed and complainant suffer irreparable loss and damage.

The Bill of Complaint alleges that the sale of sausages, frankfurters and bolognas manufactured by complainant is lawful, under the proviso contained in the pure food law of this State. This proviso reads as follows: "And provided further that the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food; if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly

show that it is a mixture or a compound and is not in violation with definition fourth and seventh of this section."

F. 5012 Compiled Laws 1897.

Definition fourth (4) referred to, provides that an imitation of, or an article sold under the name of another article is an adulteration within the meaning of the act. Definition seventh (7) provides that if the article contains any added ingredient, which is poisonous or injurious to health, shall be regarded as "adulterated."

The Bill alleges that within the protection of this proviso all meat products hereinbefore referred to are mixtures and recognized as ordinary articles of food, and that they are labelled each under its distinctive name and in a manner so as to plainly and correctly show that it is a sausage.

The Bill of Complaint prays that the Court may enjoin the defendant or his agents against the following acts:

(1) From declaring in any way to the customers and patrons of complainant or to the people of the State that the meat products referred to are sold in violation of the laws of this State.

(2) That the defendant be enjoined against enforcing the provisions of said Section 5012 of our laws, against the sale of sausages of complainant in this State, on the ground that they contain cereals, or upon any grounds that said sausages are sold in violation of said section.

The answer of the defendant which is sworn to contains a number of general denials of the allegations in the Bill of Complaint. It is not necessary here to state the denials but only those material and positive averments of fact contained in the answer. These are substantially as follows:

(1) The cereals used by complainant in the manufacture of sausages and other meat products consist of rice flour, corn flour, potato flour, and pea flour, and the purpose for which these cereals are used is (a) to cheapen the cost of the product, (b) to facilitate the incorporation of water in the product, (c) to mask the presence of water added thereto.

(2) Defendant has procured sausages manufactured by complainant and caused them to be analyzed. From such analysis he ascertained that the sausages contained as high as 30 per cent of water over and above the normal amount of water found in sausages containing no cereal. The answer also alleges in this connection that it is the custom of complainant to add to their sausages and meat products containing cereal 50 per cent of water.

(3) The answer charges that the cereals and water so used lower, depreciate and injuriously affect the quality, strength and purity of the product: that they are substances inferior to those which are recognized ingredients of pure sausage.

(4) The defendant has caused numerous prosecutions to be instituted against persons engaged in the sale of sausages containing cereals, and that in all cases so far disposed of in the circuit courts of this State, the persons so prosecuted have been convicted. These facts are well known by complainant.

(5) The answer alleges that the object of this Bill of Complaint is to prevent the Dairy and Food Commissioner from prosecuting for violations of the Pure Food Law of this State.

(6) The answer admits that the defendant has stated to dealers that they must not sell the sausages and meat products heretofore described and that any sale of them would render them liable to prosecution, but alleges that they were made in good faith, and not for the purpose of injuring the business of the complainant.

The answer sets up by the way of demurrer that the complainant is not entitled to any relief on his own showing in a Court of Equity.

The defendant has moved to dissolve the injunction upon the Bill of Complaint and answer.

It is proper to observe that the Bill of Complaint is accompanied with various affidavits of meat dealers and patrons of complainant setting forth that the defendant or his deputies have threatened to prosecute them if they sold sausages containing cereals. The affidavit of George Sutherland, Superintendent of the Sausage Department of Complainant, is also attached. This affidavit alleges that the sausages and bolognas manufactured by complainant contain from one to ten per cent of cereals and that such cereals are in no degree unwholesome.

Having stated the substance of the pleadings, I now proceed to state the issues and my conclusions from the facts which I deem to be in evidence.

The real controversy between the parties to this case arises over the construction of certain provisions of the so-called "Pure Food Law" of this State. The claim of the Dairy and Food Commissioner of this State is that the use of cereals in the preparation and manufacture of sausages is a violation of that law. Proceeding upon that determination he has notified dealers in meat products in this State that they must not sell sausages containing cereals and that if they do so they will render themselves liable to criminal prosecution. It appears also that criminal proceedings for such alleged violation of the law have been instituted by direction of the food commissioner, and that persons have been convicted as a result thereof.

It is admitted by complainants that they manufacture and sell sausages in this State, which contain from one to ten per cent of cereals but it is contended by them that this is not in violation of the "Pure Food Law."

The Commissioner bases his contention upon certain provisions in the amended act of 1895, section three (3) providing that an article shall be deemed to be adulterated when,

First—If any substance shall have been mixed with it so as to lower or depreciate or injuriously affect the quality, strength or purity;

Second—If any inferior or cheaper substance or substances have been substituted wholly or in part for it.

My opinion is that the incorporation of cereals with meat with a designation of the product so manufactured as sausage would be a clear violation of these provisions. It is practically conceded that a cereal is an inferior or cheaper substance than the meat which forms the basis of sausage.

The complainants however contend that these provisions are inoperative so far as sausages are concerned, and that sausages are embraced and protected by a proviso attached to the section referred to.

This proviso reads as follows: "That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered

for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definition fourth and seventh of this section."

The complainants contend that sausage is a "mixture or compound recognized as an ordinary article of food," and therefore the pure food law does not apply to the manufacture and sale of sausages.

The Bill of Complaint alleges that the complainant manufactures and sells at least fifty different kinds of sausages and that they contain from one to ten per cent of cereals. The main question therefore for consideration is whether these sausages containing from one to ten per cent of cereals are a mixture or a compound recognized as an ordinary article of food within the meaning and intent of the legislative act.

No authorities are cited upon this proposition and I have been unable to find any. The question I regard as somewhat perplexing in the absence of any evidence or authorities upon the point. Standard dictionaries define sausage as an article of food, consisting of meat, especially pork, finely chopped and highly seasoned. I have examined two and they practically agree in meaning although they may differ somewhat in phraseology. Undoubtedly this was formerly the commonly accepted meaning of the word "sausage."

So manufactured, sausage has been a very favorite food with many people and the material addition of foreign substances, cereal or otherwise, would tend largely to destroy those very features which made it agreeable to public taste.

If the definition of the dictionaries and that formerly assigned by the common understanding of the people be given to the word, any material addition of cereals in the manufacture of sausage would destroy its distinctive character as a meat product. The word in this sense does not mean a compound of various meat and vegetable products, but one which consists practically in whole of meat with sufficient spices or foreign ingredients to flavor it.

It is claimed however by complainants that the word "sausage" does not mean what it meant twenty years ago; that the meaning of the word has undergone a change; that the use of cereals in the manufacture of sausages has been in vogue for many years; that this usage existed at the time of the passage of the pure food law and that such fact must have been in the contemplation of the legislative mind when the law was enacted.

I do not think that I can assume from anything that appears before me that these facts are true. They have an important bearing on the case if proved, but they must be established by proof.

My present opinion is that cereals may so far be incorporated with meat in the manufacture of sausage as to destroy its distinctive character as sausage and thereby lower, depreciate and injuriously affect its quality, strength and purity. I shall not decide at present that no cereals can be lawfully added to meat in the manufacture of sausage:

I shall assume for the purpose of the present motion that cereals may be lawfully added to meat in the manufacture of sausage. That proposition must be subject to the condition already named, that cereals may be so far used as to constitute a violation of the law.

Keeping in mind these two propositions the question at once suggests itself, what kind of an injunction can the court issue in such a case?

It appears that complainants manufacture at least fifty different kinds of sausage, but I have no evidence before me of the ingredients of a single one of them. The Bill makes a general allegation that they contain from one to ten per cent of cereals. I can not now arbitrarily determine what percentage of cereals may be lawful and what unlawful.

If a court of chancery is to be called upon to pass upon so complicated a question it should do so only after a thorough investigation of witnesses and experts. It appears that the Food Commissioner of the State of Iowa approved a percentage of five per cent of cereals in sausages. He probably made this ruling after a thorough investigation.

The nature of the relief sought is also in my opinion so sweeping that no injunction should be held over the Food Commissioner till the final hearing. In the meantime the complainants will have the opportunity to test the validity of the commissioner's claim if he should institute criminal proceedings, by making a defense thereto.

The injunction must therefore be dissolved, for the reason stated.

The Attorney General has urged other reasons why the injunction should be dissolved of a grave and serious nature.

It is urged that the proceeding is practically aimed at the State itself and therefore cannot be maintained. It is urged that it is well established that a court of chancery will not enjoin an administration officer of the State from instigating a criminal prosecution for the violation of State laws, which are valid, when he is evidently in the line of his official duties, even though such officer may err as to the construction of a statute.

It is a general rule that a court of equity will not enjoin a criminal prosecution by officers of the State. It is true that courts have held that some exceptions to this rule existed. Some courts have held that a court of equity may enjoin a criminal prosecution by public officers when the law claimed to be violated was unconstitutional, or invalid, or when it was inapplicable or inoperative, and such prosecution would do irreparable injury to property rights and no adequate remedy at law existed.

See 16 Encyc. Law 372.

See 22 Cycl. 904 and cases cited.

See 21 L. R. A. Rep. 84 Notes and cases cited.

Other cases and authorities are cited by complainant's solicitors.

It is conceded, however, that the law under which the Food Commissioner has been acting is valid and constitutional. The real gist of the claim of complainants is that the commissioner has made an error of judgment in determining that adding cereals to meat in the manufacture of sausages constitutes a violation of the law—in other words that the law is inapplicable. My opinion is that the weight of authority is against the proposition that courts of chancery can enjoin an administrative officer of the State in cases of this nature, from instigating criminal prosecutions for a violation of the statute.

A well considered opinion on this question is found in the case of Arbuckle vs. Blackburn, 113 Fed. Rep. 625. Our own supreme court

in the case of Pratt Food Company vs. Bird, referring to the case of Arbuckle vs. Blackburn and other cases say "In so far as these cases lay down the rule that a court of equity will not interfere to restrain a public officer from invoking the criminal law and instituting a prosecution for the violation of a statute, they have our full approval. A court of equity will not transfer to its own jurisdiction the trial of a criminal case, and this though the prosecution may fall with some hardship upon the accused party."

Pratt Food Company vs. Bird, 14 D. L. N. 305.

By this opinion our supreme court emphatically endorsed the position taken by many of our courts, that courts of equity will not enjoin State officers from instituting a criminal prosecution for the violation of a statute, which is valid and constitutional, although the officer may be in error in the construction of the statute.

The common law courts have ample authority to pass upon the question whether the officer has erred in the construction of the statute, or upon the question of the applicability of the statute to the given state of facts in a criminal case, and those are the appropriate courts to pass upon such questions.

Our State court went still further in the case of Osborne vs. Charlevoix, 114 Mich. 655. In that case complainant filed a Bill of Complaint against the State Game and Fish Warden asking that the latter be restrained from enforcing the provisions of a certain act relating to the catching of fish on the ground that the provisions were unconstitutional or inoperative.

The court states "It is a general rule that criminal prosecutions cannot be restrained by injunctions. Once have it understood that they may be and the public would labor under additional embarrassment to the already great obstacles to the prosecution of crime. There is no excuse upon reason or authority for enjoining the prosecution of the complainant for violation of the law providing for a close season. If the law were unconstitutional it would be available by way of defense to the criminal charge, and therefore no occasion for chancery to take jurisdiction for the want of an adequate remedy at law."

Osborne vs. Charlevoix C. Judge, 114 Mich. 655.

Courts of chancery have enjoined criminal proceedings, when attempts have been made to enforce unconstitutional or invalid laws, which might result in the direct destruction of property, and under this head of equity jurisdiction appear most of the cases cited by complainant. So there is a class of cases where the official is himself executing the law and confiscating property without having lawful authority to do so.

I do not regard the cases cited by complainants as analogous, to this.

The law which the defendant seeks to enforce is valid and constitutional. If he is in error, it is simply as to whether the particular articles manufactured by complainant come within the meaning of the law. This question will often materially arise in cases of criminal prosecution for a violation of police law.

The real question in all this class of cases is whether the article is

manufactured in violation of law and the court is not called upon to determine any question of the validity of the law itself.

It is also to be observed that generally in the class of cases cited by complainant the injuries threatened to property rights by criminal prosecution were local, direct and within the immediate reach of the court, where an injunction would be an effective and practical remedy.

Relief by injunction in this case against criminal prosecution appears to me an impracticable and ineffectual remedy.

An injunction against the defendant for commencing criminal prosecutions will not prevent them from being commenced. Any one of the many prosecuting attorneys of the State may commence a criminal prosecution for selling the sausages manufactured by complainant, and the Food Commissioner would be powerless to prevent them. He has no exclusive authority to institute criminal proceedings. In fact he institutes them, if at all, through the agency of the prosecuting attorney.

The injury threatened by criminal prosecution is not a local one. It is not confined to a single county. It may occur in any county of the State.

It does appear to me that an injunction so impracticable, so sweeping and so powerless to effect any restraint, would amount to an idle ceremony. Where the relief prayed can possibly accomplish no good; and cannot be effectively executed, courts of chancery deny it.

If the complainant be correct in its contention that its sausages are not made and sold in violation of law, a final interpretation of the law by the supreme court of the State, in the present case will afford ample protection to complainant from that time. A final authoritative decision of the court in favor of complainant's contention would undoubtedly be acquiesced in by the defendant and the prosecuting attorneys. This is the only remedy against the institution of criminal prosecution, that I can imagine possible. Injury may accrue to the complainants in the mean time. But it must be endured upon the ground that if criminal prosecutions could be enjoined by courts of equity under circumstances such as exist in this case, the administration of justice would be seriously embarrassed and a precedent established which might bring incalculable mischief to the people of the State.

For these reasons also I hold that the injunction must be dissolved, as against the institution of criminal proceedings.

These considerations by no means dispose of the case.

It seems to be conceded that the defendant has issued circulars broadcast condemning sausages containing cereals as a violation of the law, and warning dealers against selling them.

This has been done by the defendant in the capacity of a State officer and if not warranted by the provisions of the law, serious injury has been done the complainant. A continuation of such acts would result in additional injury. Under circumstances of this nature a State officer may be enjoined.

The Bill of Complaint in the Case of the Pratt Food Company vs. Bird was filed to restrain defendant from sending out bulletins, writings, and publications that complainant's food for horses and other articles were manufactured and sold in violation of the law.

Our supreme court in that case says "If the acts which are threatened are unlawful, it cannot be doubted that placing in the hands of every

dealer in the State a bulletin, which in effect threatens them with prosecution in case they make use of these products in the form in which they are lawfully sold to them would be to absolutely exclude complainants' business from the State."

Pratt Food Company vs. Bird, 14 D. L. N. 304.

The complainants are therefore entitled upon a proper showing that the sausages condemned by the Food Commissioner are not manufactured and sold in violation of the law, to an injunction restraining the Food Commissioner from sending out bulletins, writings, or publications or notices that complainants' sausages are manufactured and sold in violation of law and threatening prosecutions if such articles shall be sold.

I have however already determined that this court can issue no injunction of this kind till after a hearing of proofs.

So far as the merits of complainants' case upon the main issue are concerned, I have made no decision and do not intend to do so. I think that it would be unwise and improper. The refusal of the injunction in no way affects the trial of the case upon its merits. The case must be tried and each party has a right to have it tried. I have therefore practically decided only one question which will arise at the final hearing, viz.: Whether the court can enjoin the State officers from instituting criminal proceedings. My present opinion is that an injunction of that kind can not be issued. The complainants on a hearing of the case are not precluded from asking again the same relief and the same question may recur both on the hearing in this court and on an appeal to the supreme court in case the decree of this court be appealed from.

The injunction issued must be dissolved for the reasons stated.

ORVILLE W. COOLIDGE,
Circuit Judge.

COOPERATION IN DAIRYING.

In unity is strength. The truth of this has been demonstrated repeatedly from time immemorial, proofs are abundant everywhere and can be observed in nature, in all walks of life and in almost every business. In fact it has become so common that we are prone to overlook its force until some great problem arises. Then we become conscious of it. A great wave of sentiment or enthusiasm develops and unites us to concerted action for the common cause, and when this stage is reached all opposition must yield.

The great commonwealth of the United States of America is but one example of the strength and power of unity. It was cooperation on the part of each individual state which made this union possible and cooperation is the foundation on which it rests today.

From ancient time man has recognized and made use of the power and force cooperation embodies. Where man singly has been unable to cope with great difficulties, cooperation has been resorted to and in nearly every instance it has accomplished its object. It is of singular interest, however, to note that until a few years ago cooperation was only enlisted as the last resort and in time of dire need. We believe the time has come when man should plan ahead of the need, and if cooperation has proved of so great assistance in the past in solving great problems why not use it in the solution of problems which lie before us today.

Farming and more especially dairying lends itself more readily to cooperation and cooperative manipulation than any other occupation. There are so many ways in which farmers and dairymen can cooperate and there are so many problems to solve that we need not go hunting for opportunities to apply the principles. Reference is here had to matters of financial or pecuniary nature, but history has shown that where cooperation has once gained a foothold it has been more than a financial assistant. It has had an educational effect on the men engaged in it and on the communities in which these men live which tends for all that is desirable in citizenship. Educators testify that young men and women from communities in which cooperation is most extensively practiced make most desirable material from which to mould the good citizens of the future. It educates and produces intelligence and creates a clearer conception of the real value of life.

Cooperative dairying offers much pecuniary advantage. We need but look up the statistics of cooperative dairying in the old world to be convinced. The little country of Denmark for instance has in this way in the short period of 20 years increased the average production of butter per cow from 120 to 224 lbs. per year. Figuring the butter at 25 cents per lb. this means that the revenue from butter alone was increased from \$30.00 to \$56.00 a cow per year, or that the gross income per cow had been almost doubled.

The statistics of Michigan show an average production per cow of 143

lbs. of butter in a year, thus indicating a great field for development of production. We believe this development can best be accomplished, as it was accomplished in the old world, in a cooperative way, through the medium of cooperative cow testing associations and their inevitable followers the breeding associations. Cooperation in this way has already demonstrated its practicability under our Michigan conditions and should be encouraged by everyone who is interested in better economic results for the dairymen of the State. A little figuring will show the importance of this movement. According to the census of 1904 there is in the State 746,685 dairy cows at the age of two years or over. An increase in the average production per cow of even one single pound a year would mean 746,685 pounds of butter per year. Figuring the butter at a price of 25 cents a pound, it would mean an increased revenue to the dairymen of the State of \$186,671 per year. Being accomplished by better breeding, economical feeding and selection of the most economical producer for breeding purposes, such addition to the annual revenues would be all clear profit.

Dairymen could cooperate in the purchasing of feed. When bought in large quantities it can usually be had at lower prices.

Cooperation is of advantage in the selection of breed. This has been demonstrated in our neighboring states and to some degree in this State. We find in this State whole communities interested in the same breed of dairy cattle and the result is that great bulls for breeding purposes can be obtained at much smaller expense to individuals living in the community. The surplus young stock is easier and more profitably disposed of if the community has created a reputation for uniformity of breed.

In the manufacture of butter and cheese cooperation has been practiced with marked success in many sections of the State, and it has produced better butter and cheese and more money for the dairymen. Failures in this line of cooperation have in most instances been due to errors of ignorance or mismanagement or due to lack of effort on the part of individuals. Cooperative effort depends for its success on the same every day principles which underlie success in any business undertaking.

Creameries can cooperate for mutual advantage and for the benefit of the dairymen living in their territories. Creameries have come under our observation where the difference in the cost of manufacturing one pound of butter was more than two cents, although they were located only a few miles apart. Cooperation would soon show them the cause of this variation and once found might be easily remedied. There is a great difference in the consumption of fuel for every 100 pounds of butter manufactured, due in many instances to causes which could be revealed and remedied through cooperation with neighboring factories. Cooperation among creameries would have a tendency to increase the uniformity and better the quality of the product and thus create a reputation for the butter manufactured in that section of the State. Cooperation may be resorted to to mutual advantage in the marketing of the product if uniformity of grade has been established. Saving in the cost of manufacture, introduction of better methods, and increased revenues accruing from markets established for uniform products at good prices would mean larger revenues for the dairymen located in such territory.

What is true of cooperation among creameries is equally true for cheese factories. The establishing of uniformity in quality, texture, color and size would go a long ways towards creating demand for Michigan cheese and as the demand usually dictates the price it would mean better prices.

There are times in the history of any industry when vital issues are at stake and then is the time when cooperation counts large. The dairymen of this country have once been called upon to defend their rights and should the same or like issues arise in the future no one thing could be of greater assistance in a campaign for its rights than thorough organization. The dairymen should organize locally in associations and cooperate in the dissemination of dairy knowledge. Meetings can be had occasionally where vital questions can be discussed, and in time a sound cooperative spirit will be developed. It paves the way for cooperation along all dairy lines and finds expression not only in matters of economic nature, but in progress all around, a better understanding of neighborly duties, better fellowship and a healthier enjoyment of life, and furnishes the right sort of foundation of life socially and individually.

CREAMERIES IN OPERATION.

The following tables have been compiled from the reports of inspectors and are of interest as showing the development of the creamery industry during the past three years. They do not include shipping stations or skimming stations. Condenseries are counted as whole milk plants.

| | Whole milk. | | | Gathered cream. | | | Combined milk and cream. | | |
|-----------|------------------|-----------------------|--------|------------------|-----------------------|--------|--------------------------|-----------------------|--------|
| | Stock companies. | Individual ownership. | Total. | Stock companies. | Individual ownership. | Total. | Stock companies. | Individual ownership. | Total. |
| 1905..... | 111 | 47 | 158 | 15 | 17 | 22 | 25 | 34 | 59 |
| 1906..... | 96 | 43 | 139 | 16 | 35 | 51 | 37 | 46 | 83 |
| 1907..... | 68 | 43 | 111 | 32 | 63 | 95 | 48 | 47 | 95 |

| b | New creameries. | | | Discontinued creameries. | | | Changed from stock companies to individual ownership. | Changed from individual ownership to stock companies. |
|-----------|------------------|------------------------|--------|--------------------------|------------------------|--------|---|---|
| | Stock companies. | Individual creameries. | Total. | Stock companies. | Individual creameries. | Total. | | |
| 1906..... | 11 | 30 | 41 | 1 | 6 | 7 | 2 | 1 |
| 1907..... | 11 | 28 | 39 | 6 | 5 | 11 | 8 | 1 |

| c | New creameries. | | | | | | Discontinued creameries. | | | | | |
|-----------|-----------------------|-----------------|--------------------------|------------------|-----------------|--------------------------|--------------------------|-----------------|--------------------------|------------------|-----------------|--------------------------|
| | Individual ownership. | | | Stock companies. | | | Individual ownership. | | | Stock companies. | | |
| | Whole milk. | Gathered cream. | Combined milk and cream. | Whole milk. | Gathered cream. | Combined milk and cream. | Whole milk. | Gathered cream. | Combined milk and cream. | Whole milk. | Gathered cream. | Combined milk and cream. |
| 1906..... | 7 | 12 | 11 | 2 | 4 | 5 | 1 | 2 | 3 | 1 | 0 | 0 |
| 1907..... | 7 | 18 | 4 | 2 | 6 | 2 | 1 | 3 | 1 | 3 | 1 | 2 |

| d | Stock companies. | Individual ownership. | Total. |
|---------------|------------------|-----------------------|--------|
| 1905..... | 141 | 98 | 239 |
| 1906..... | 149 | 124 | 273 |
| 1907..... | 148 | 153 | 301 |
| Increase..... | 7 | 55 | 62 |

The tables show (a) that the number of whole milk plants in two years has decreased 47, while the gathered cream creameries have increased 73 and the combined milk and cream have increased 36.

The decrease in numbers of whole milk creameries does not mean that they were closed, in fact (c), only 6 whole milk plants discontinued operations; but a large number changed from whole milk plants to combined and gathered cream creameries.

During the same period 80 additional creameries commenced operations, while 18 discontinued, showing a net increase in the two years of 62 (b & c). Of the new creameries 18 were whole milk plants, 40 gathered cream and 22 combined milk and cream plants. Of the discontinued plants 6 were whole milk, 6 were gathered cream and 6 combined.

The record of new creameries show 59 owned by individuals, 21 owned by stock companies. Of the discontinued, 11 were owned by individuals, 7 owned by stock companies.

CARE OF MILK AND CREAM ON THE FARM.

The question of clean wholesome milk becomes more and more important every day. No matter how skilled the buttermaker or cheesemaker, the choicest butter or cheese cannot be made from milk that is not clean and wholesome. Unclean milk is the source of bad flavors which cannot be entirely overcome by the buttermaker or cheesemaker, though he be an expert. It is true that one man may have skill enough to make better butter or cheese out of a poor quality of milk than another; but no one can make a gilt edge product out of milk that is produced and handled in such a way that bad flavors are allowed to develop. The result of the farmer's carelessness in handling milk always is therefore, butter and cheese of off grade. The markets today are discriminating more than ever before on the quality of dairy products. Commission men are paying for both butter and cheese according to quality. The highest market price is paid for products of the highest quality, and lower prices corresponding to the quality for all grades below extra. Only for dairy products of the highest quality are paid the highest quoted prices, and the quantity that receive the highest price is comparatively small. The most of it receives less than the highest quotation because it is off flavor. This off flavor is caused almost invariably because the farmer is careless in the production of and handling of milk.

Then again, this question of clean, wholesome milk is becoming more important because the various State Dairy and Food Departments are considering dairy products as foods more critically than ever before. The time will come when butter and cheese produced from unclean, unwholesome milk will be declared unfit for human food, and while the farmer is now producing a better quality of milk, on the whole, than ever before, it is necessary for him to take even more pains than he is now, if he wants to make the greatest profit out of dairying.

GOOD MILK.

Milk that is drawn from the healthy cow is pure and wholesome. If it can be kept in that condition and properly cooled, it can be delivered at the cheese factory or creamery in such condition that it will make butter or cheese of the highest quality; or if it is skimmed on the farm and the cream properly handled the cream can be delivered at the creamery in such a condition that this will make butter of the highest quality. The reason why milk deteriorates in value and develops bad flavors and odors is because dirt and dust and filth are allowed to get into it after it is drawn from the cow, and because the milk is not properly cooled at once and kept cool until delivered at the factory.

HOW TO KEEP MILK CLEAN.

Milk can be kept clean by having a clean stable, clean cows, clean dairy utensils and a clean man to do the milking. The cows should

be kept clean enough so that no filth adheres to them, then there will be no manure or filth to drop into the milk as it is being drawn. Not only this, but the cows flanks and udders should be brushed and moistened so that there will be no dust or dandruff, or anything of that nature that drops into the milk pail while the cow is being milked, because it is this dirt, and filth and dust that get into the milk pail that raise hob with it afterward. Each particle of dust and dirt that gets into the milk is liable to carry with it bacteria, or germs, which multiply rapidly when they are in the warm, sweet milk, rich in food, and their development causes the milk to deteriorate in food value. Some of these bacteria produce what is known as gassy milk. This produces gassy curd in cheese making. Others produce bad flavors which are noticeable in the butter and also in the cheese. A barn in which the ceiling is covered with cob-webs, which are blown about by the wind, fall down whenever touched by the attendant, is not the proper kind of a stable in which to produce clean, wholesome milk. A stable which contains bad stable odors, poorly ventilated and contains foul, bad smelling air, is not the place to produce good milk, because milk absorbs these bad odors and it is almost impossible to get rid of them. Consequently, the stable should be clean and as free from dust as possible. It should be well ventilated, should be cleaned out regularly and thoroughly to prevent the bad stable odors. Care should be taken not to feed dusty hay just before milking because this fills the stable full of dust which settles into the milk pail, carrying with it bacteria. The bedding should not be stirred up just before milking. In fact nothing should be done which will create a dust, because on these particles of dust floating through the stable are bacteria which, when they get into the milk pail, produce all the trouble. This is the first step necessary to produce wholesome milk.

CLEAN UTENSILS.

It is of little avail to have the stable clean, the cows clean, and a clean milker if we milk into a dirty pail, one that has not been properly washed and scalded. If in the crevices of the pail there is more or less milk from the last milking, which by this time contains numerous bacteria and we milk the warm milk into it, just as soon as the milk comes in contact with these bacteria, they begin to develop and grow. It is the same with the milk cans, with the strainer, and with every dish in which milk is deposited. They should all be thoroughly cleaned and scalded before the milk is allowed to dry upon them. If they are left for a considerable length of time with the milk drying upon them, it is almost impossible to get it off. If they are rinsed immediately the milk all comes off. Then they should be washed with warm water containing some cleansing powder, rinsed again and then scalded. The scalding water should be hot enough (if steam cannot be used for the purpose) so that the pail or can will be heated to such a degree that it will dry itself without wiping. It is not only not necessary to wipe dairy utensils after being scalded, but it is an absolute detriment so far as cleanliness is concerned. They should be hot enough from the scalding so that they will dry themselves. Then it is a splendid practice to set them out in the sun, in such a position that the sun can shine down into

them because the bright rays of the sun will destroy bacteria that cannot be destroyed in any other way. Clean utensils go a great way toward producing clean wholesome milk.

CLEAN MILKERS.

It is not necessary for a farmer to dress in a white duck suit every time he milks; but it is necessary that he be reasonably clean. His hands ought to be dry and clean. It is absolutely filthy to milk with wet hands. If the hands are wet with milk and this liquid is allowed to drop into the milk pail, it will carry with it not only filth, but bacteria which begin to multiply at once. So the milker should be reasonably clean, the cow should have clean teats and udder, and the milker should milk with dry hands. This is absolutely necessary.

SMALL TOP MILK PAIL.

It is a good plan to have a narrow topped milk pail because less dust is liable to get into a narrow topped pail than into a broad topped one. That is the only philosophy in it. The very best milk pails are those with exceedingly narrow tops, or narrow openings into which one milks. The philosophy of clean milk is to keep the dust and dirt out of the pail. If once it gets in, it is impossible to get it out. In reality it does very little good to strain the milk. Of course the strainer will take out the hairs and the straws, and the solid portions of dirt which get into the milk. Taking these solid portions out really does but very little good because they have been washed off by the milk so that *they* are really clean. But filth, that which raises hob with the milk, has been washed off these solid particles by the process of straining and is not strained out.

COOLING THE MILK AND CREAM.

It is impossible to keep all of the dust and dirt out of the milk. Be as careful as one will, some little dust will get into the milk and will, therefore, carry into the milk bacteria. If the stables are clean, the cows are clean, the milker is clean, the utensils clean, this dust and dirt and filth will be reduced to a minimum. There will still be, however, some bacteria in the milk. These will go on multiplying unless something is done to prevent it. The proper thing to do is to cool the milk down to as low a temperature as practicable, because when the milk is cooled down the bacteria cannot grow and develop very rapidly. It is just on the same principle as planting corn in the spring time. If you plant too early when the ground is cold and wet, the corn will not grow. There is not enough warmth to encourage and develop germination. So it is with bacteria in milk. Bacteria are nothing less than microscopic plants. If the milk could be cooled down to 39° Fahrenheit, the bacteria would not grow at all. This, however, is impracticable; but if the milk is cooled down below 60°, the bacteria will develop very slowly. It is not a very serious proposition for a farmer to cool his milk down below 60°. This cooling should be done as soon after milking as possible because the bacteria are developing all the while until the milk is cooled. If it is put off for several hours before it

is cooled down, much harm has been done. There is all the more bacteria in the milk, consequently the milk will deteriorate all the more rapidly. If the milk is set into good cold water as soon as milked and stirred until the milk is of the same temperature as the well water, and kept at that temperature until it is taken to the factory, the milk can be delivered in first class condition. The trouble is the farmers do not cool their milk at once, or they cool it down and then allow it to stand in warm water. Just as soon as the milk becomes warm again, then the bacteria begin to grow. It is just as necessary to keep the milk cold as it is to cool it down in the first place. Where one can arrange to have a tank in which to put the milk where all the water that is pumped for the various purposes on the farm flows through this tank, the problem is practically solved. With very little expense, one can have the windmill pump into this tank around the milk can and have the overflow run into the stock tank for watering the stock. Flowing first around the milk cans does not in any way injure the water for the stock. This produces almost a constant change of water in the tank surrounding the milk and will keep it cool until it can be delivered at the factory. If this cannot be done, then the milk should be set into cold water and stirred and this water changed once in a while. Otherwise it will get warm in warm weather.

The same principle holds true where the milk is skimmed on the farm and the cream sent to the factory. Only in this case it is much less trouble to take care of the cream than it is the whole milk, because there is a great deal smaller quantity to take care of. The cream should be cooled to the temperature of the well water just as soon as the skimming is done and then it should be kept cool until it is delivered at the factory. In very hot weather it may be necessary to put a piece of ice on the cover of the can before you start for the factory. This will keep it cool until it is delivered.

Another great mistake that some farmers make is in mixing warm milk with cold milk, or mixing warm cream with cold cream. It should never be done because it almost invariably develops bad flavors and odors which can never be gotten rid of. The morning's milk or the morning's cream should never be mixed with that of the night previous until it is cooled to the same temperature. Then it can be mixed without causing any trouble.

In the winter time the cream or milk should not be allowed to become frozen. It should not be kept in the cow stable, but should be removed from the stable, both in the summer and winter, just as soon after milking as possible. Otherwise it is liable to absorb stale odors. In the winter time the cream or milk can be kept from freezing by covering with a canvas and putting with it another milk can full of hot water. This will keep milk from freezing in the coldest weather. An excellent plan also is to cover the milk or cream in the summer time with a canvas to keep it cool, and the milk hauler or the cream hauler should always have his cans covered with a canvas both winter and summer. In one instance to protect them from the heat and dust, in the other from the cold.

If these simple principles and rules are followed, there will be no trouble about delivering good milk or cream to the creamery and the cheese factory at any and all times of the year.

INVESTIGATIONS RELATING TO MILK SOLD AT RETAIL IN CITY MILK SUPPLY AT INTERVALS DURING THE SUMMER OF 1907.

Beginning July first, 1907, this Department began a somewhat systematic inquiring into the milk sold at retail in a few of the cities of Michigan. This work was of necessity quite limited in scope and yet enough data were obtained to make the information of very great value. The work continued from July first to September fifteenth inclusive. The summer period was selected because of the difficulties generally observed in getting milk during the hot months that is fit for human consumption owing to the rapid changes in the unclean product, influenced mainly by the excessive heat. Branch laboratory testing stations were located in Grand Rapids, Lansing, Ann Arbor, Ypsilanti and Muskegon.

Aside from the milk sold at retail to families, the condition of milk sold in restaurants was studied also. In the city of Lansing, milk was passing over the restaurant counters to consumers from a large tank. No effort on the part of some restaurant keepers was made to keep the milk stirred and consequently some customers would get nothing but skim milk while another might get cream. In some cases it was evident that the proprietor of the restaurant took advantage of the system so he might obtain cream for table use and in these instances none of the customers received whole milk but all obtained skimmed milk when asking for a glass of milk. This is no small matter in consideration of the large number of persons engaged in occupations requiring that they take a noonday lunch at the restaurant. One result of this work has been that all restaurants in the city of Lansing now handle milk in bottles and uniformity as well as greater cleanliness has thus been secured.

In the city of Lansing about 600 samples of milk were examined in all showing an average from 1.0 per cent fat up to 6.0 per cent. In many instances a formation of gas was noticed in the fermentation tube showing filthy methods of handling and in all such instances an over abundance of bacteria as shown by the colony count, served as a satisfactory check on the method. A visible improvement was noticed as the summer advanced showing a desire on the part of the milk dealers to produce better milk. Owing to this laboratory being located in Lansing, this was the only city where any extended studies were made of a bacteriological nature.

In Grand Rapids about 800 samples of milk were examined and these revealed a great variety of conditions. Nearly all of the milk dealers carried ice in their wagons and hence the milk was delivered to the consumer in quite a satisfactory condition so far as temperature was concerned. A good many unclean samples were found as well as many of low quality from a fat standpoint. The time of coagulation was quite low in the Grand Rapids milk in spite of the fact that ice was used, indicating that the great need for that city is a higher standard of sanitary requirements.

In Ypsilanti about 150 samples were examined and these show a variety of conditions. Some of the dealers carried ice and about as many did not. The fat content was very variable and the coagulation period low, showing a greater need for cleanliness. The odor of the coagulated milk was in many instances quite suggestive of the filthy source of the contamination.

The milk of Ann Arbor was the best in all respects considered together of any that was studied. The fat content was more uniform and the period of coagulation much higher or longer. With but few exceptions all of the milk dealers carried ice during the summer. The condition all through of the milk in Ann Arbor compared favorably with that in Lansing during the last four weeks of the inspection.

In Muskegon about 80 samples were taken and these showed the usual variation as found in Grand Rapids.

The work conducted during the summer of 1907, was the first attempt at a systematic study of the milk in the cities. It has demonstrated the great need in each locality for such work and also proved what improvement would follow such inspection and not only should this work be carried on during the summer but the entire year, for it is much easier for the dairyman to produce good milk in the summer than in the winter. The reason bad milk is so easily noticed in summer is because the temperature is just right for the bacteria to multiply most rapidly. If the dairyman was compelled to produce milk in summer under all of the winter conditions except the temperature, much of the milk now marketed would not remain sweet long enough to reach the consumer. With cows generally out on pasture during the summer months there is no excuse for lack of cleanliness. Indeed there is little excuse for untidiness at any season of the year, but with the ventilation and light problems disposed of, as in summer, the dairyman has simply himself to blame if the milk is unclean. The Health Officer of the village or city takes upon himself a tremendous responsibility if he permits milk to be sold in his locality to the city retail trade which is not in a high state of cleanliness.

Milk when warmed should not develop a barnyard odor. It should not coagulate inside of 15 hours and when sour it should not develop a foul, unpleasant smell. It is no longer a theory; it is an established fact that infant mortality bears a definite relation to the milk supply and a milk producer who delivers unclean milk on his route is counteracting those influences which tend to lessen the death rate and promote a higher standard of decency.

Milk should be kept pure and cold and to better attain this end milk dealers should be required to carry milk in sealed bottles surrounded by ice. Much may be said of pasteurization and sterilization and there may be times when pasteurization is desirable. Certainly complete sterilization is at times imperative. But no system of renovating or cleansing can ever take the place of preventative measures on the start and it has been demonstrated that it is possible to produce pure milk and our efforts must not cease until every community in the State is blessed with a pure milk supply. To this end this Department will continue its studies of the city milk supply and invites the cooperation of local milk inspectors and Health Boards.

A PLEA FOR CLEANER MARKET MILK.

In taking up the subject of milk for city consumption, it is unnecessary to discuss the need of purity and cleanliness. All admit its necessity, although our degrees of sensitiveness vary greatly.

It is a subject of importance in every home. No other food product can take the place of milk. No other is more universally used, and no other should be more carefully guarded by the State and city authority. Not alone in infancy, but in middle life and old age is milk a common article of food. The nursery, the hospital, the restaurant, the home kitchen would be unfortunate could not milk in some of its various forms be supplied. Milk is nature's food, containing all the elements of nutrition. Its color designed as an emblem of purity; but man in his greed and neglect has surrounded the cow with artificial conditions that produce impurities.

Dairymen, milk dealers, dairy papers, physicians, boards of health and women's clubs have discussed the milk problem in its many phases. Manufacturers of dairy goods have placed on the market a fine line of machines and supplies for handling milk; but granting full credit for all that discussions and machinery has done and can do, we are brought to the fact that the only way to secure pure milk is to have it pure and clean at the start and keep it so. Clean cows, clean stables, clean milkers, clean pails and utensils, clean cans and bottles, clean kitchens and ice boxes are necessary elements in securing a clean milk supply. Pasteurizing, clarifying, the sterilizing of bottles, or even the people who consume the milk cannot remove defects that would not exist had the conditions at the dairy farm been right.

This brings us to a discussion of what constitutes sanitary conditions at the farm. The correct idea of sanitation is that we make use of the air and sunshine, which the allwise creator furnishes free, and sends everywhere if we will only let them come in.

No sympathy should be shown men who will place their cows in a dark dirty dungeon, every window covered up, the ceilings open or built of straw laid on rails or pieces of boards; no gutters, no bedding, rotten floors, no air except what comes through cracks or broken doors. Such men are entitled to no sympathy except for their ignorance and if ignorance deserves sympathy, our tears would flow continually.

A clean barn does not mean an expensive one. Ventilation does not mean drafts of air. Windows in a stable need not produce more cold. Many of our most sanitary barns are not costly structures and many high priced barns are but prison pens for the cows. Many times have farmers been induced to put windows in their barn, use building paper in place of straw for sheeting, nail up broken places, arrange some kind of ventilator, sweep down the cobwebs and whitewash the ceilings at a total expense of not more than \$10 to \$25 and I have yet to find one who did not admit that the change was worth the cost.

The problem at the farm is to adopt methods that will produce clean milk, and at the same time be practical and not out of the financial

reach of the farmer. To illustrate: We find a barn clean and well lighted, but cows wade through mud and filth to reach the stable. Another has hogs in the same stable and swill barrels in the milk room. One man has very dirty cows and stable but uses the Gurler sanitary pail. Another has cooling tank and aerator in the same room as the cows. One will feed his cows silage and wet malt, while another feeds corn fodder and corn meal and then wonders why the cows do not give more milk. Some cows get their water supply from a mud hole, others from a tank of ice water. Now those things can be remedied at a little expense. Information on feeding can be secured from dairy papers and at institutes while window glass, whitewash, building paper, brooms and a tank heater are not expensive and profitable results follow their use. Practical conditions under which milk can be produced at a cost which leave a margin of profit are:

HEALTHY COWS.

A man intelligent enough to manage a dairy successfully can tell very closely the health of the herd. A possible exception is with tuberculosis and that disease would be far less prevalent if proper ventilation was provided. Sunlight, pure air and cleanliness are foes of the disease.

WELL LIGHTED AND WELL VENTILATED STABLES.

The expense of light and ventilation are more imaginary than real and their cost is more than repaid by the lessened expense of feed. It needs no argument to convince a reasonable man that a dark, damp stable in which foul air is confined is not a suitable place for dairy cows, either for health or milk production.

Proper light and sunshine can be secured by using plenty of windows unless as we sometimes find it, the stable is on the north side of the main barn, or is surrounded by sheds. Such conditions should have been avoided in building, and can usually be remedied by changing the cow stable to another part of the barn. It is noticeable that when a farmer has a good and a poor stable that the horses are given the best one. That should be reversed. If good quarters cannot be provided for each, then the cows should have the benefit of the best. Ventilation can be secured by the King System, but where that cannot be provided a suitable arrangement of windows or other openings will permit circulation of pure air without direct drafts. Openings in the side of the stable with muslin covers, and chutes leading to the barn loft are practical and permit the foul air of the stable to be replaced with pure air from outside. Any system is better than open doors and cracks and will pay liberally for the cost of installing.

CLEANLINESS.

The necessity of calling attention to the need of cleanliness in producing and handling milk is to be regretted. It would seem as tho the instinct that the creator has given humanity would prevent the keeping of cows in many places and in the condition that many are found.

A cow, given the freedom of a pasture, will avoid filth, but when placed

in the stable, is at the mercy of her owner, and must accept whatever conditions he supplies. It would be interesting if one had the ability, to write a biography of "Old Brin" telling how she uncomplainingly accepted the neglect and abuse of her owner, or how nobly she responds to good feed, a pleasant home and kind treatment. Cleanliness of stable and herd must be followed by cleanliness in handling the milk or our labor will be lost. A stable is not the place to strain the milk. A corner of the barn or any empty stall is not the place for a milk room; a bare plank or cement floor is not "a bed of ease." A wide-rimmed hat, brushing hair and dirt into the pail is not the proper thing in dairy millinery. Hands that have toiled at other work are not suitable dairy utensils until they are washed: Unclean pails, cans or strainers are not conducive to clean food production; a corner of the stock tank is not a good place to cool milk; a hog pen is not a desirable neighborhood for a milk stand, and a dirty door yard is not a good place to "air" milk cans or pails. But why name things to avoid. Everybody knows them. Any one worthy the name dairyman or any producer of an article of food knows that uncleanness anywhere from the "feed" to the "fed" is unjust to the consumer. The breeding and management of the dairy herd offers a wide field for the intelligent use of brains, and the price of dairy products offers financial reward for their labor. Observation among dairymen shows that those who combine brains and brawn are not complaining about low prices. The chronic kickers are those who, for the good of the consumer, should retire from the business. It is the man in front of the cow, behind the cow and at the side of the cow that is responsible for the purity of our milk supply, and the success of the industry. It is unfortunate that men in whom cleanliness and energy are not prominent characteristics should follow the dairy business.

THE MILK DEALER.

The handling of milk after it leaves the farm is in most of our cities an occupation separate from that of producer. Experience shows a high degree of honesty among milk dealers. In nearly every case of skimming, watering, or use of preservative, it has been traced back close to the farm. The license system, city and state inspection, and business competition has kept the dealer in the path of righteousness. The most needed change with the dealer, is to stop selling from open cans on the street. Small quantities, pints and quarts, should be sold in bottles, and larger amounts for hotel and restaurant trade in bottles or cans. That would not only prevent contamination from street dust and odors, but would eliminate the too prevalent custom of patrons leaving the milk in an open dish on the porch or post for sometime after delivery. The new paper milk bottle is cheap enough to be thrown away after once using, and thus avoids the present objections to bottle.

THE CONSUMER.

The consumer should be criticised for not discriminating enough in quality and purity when purchasing milk. But little attention is given to anything except price. The milk from one dairy at 10 cents a quart

may be cheaper, measured by fat and food content, than from another at six and in cleanliness still more difference may exist. A good dealer is entitled to reward, and if consumers would encourage the good and avoid the bad, we would make more rapid progress toward improved quality. Some dealers are selling milk testing five and even six per cent butter fat. Now two quarts of five per cent milk contains one pint of 20 per cent cream. That pint of cream if sold separate would cost ten cents; so a person buying two quarts of five per cent milk for 14 cents, get ten cents worth of cream, leaving only four cents as the cost of one and one-half quarts of skim milk, surely a low price, when compared with steak at twelve to twenty cents a pound. Milk should be sold, like other products, on its quality, and quality should mean not alone cream but freedom from impurities. Look at the bottom of the bottle as well as the top. The top is the cream, the sediment at the bottom is a mixture of ingredients that ought not to be there.

A noticeable feature of the milk business is the amount we see used at hotels and restaurants. It is very common to see a glass of milk take the place of tea or coffee; especially do we notice this at the business men's lunch counter. A sandwich and a glass of milk, often the milk alone is called for. Surely a glass of cold, nice-flavored milk is a valuable and pleasant drink. Many soda fountains also serve milk as an article in their list. It is up to our milk producers and dealers to greatly increase its consumption. If they will supply a good quality, clean, pure, cold, its use will steadily increase. It is both a food and a drink; healthy, nourishing, easy of digestion, a muscle former, brain builder and nerve restorer.

AN IDEAL DAIRY BARN.

An ideal dairy barn must have the following characteristics:

First. It should be so constructed as to be economical of both time and labor in caring for the herd.

Second. It should be so constructed that it can be kept in a clean and sanitary condition.

Third. It should be so constructed that it best protects the health and contributes to the comfort of the herd.

ARRANGEMENT WITH REGARD TO ECONOMY OF LABOR.

Some people have considered it necessary to construct a stable of only one story in height and have this separate and distinct from the storage barn, where the feed is kept. In a properly constructed stable, however, that is unnecessary. The feed can be stored in the second or third story of the barn above the stable without sacrificing in the least so far as the principles of sanitation are concerned, and by so doing, much time and labor is saved in caring for the herd. If the walls and ceiling of the stable are perfectly tight, and the stable properly ventilated there is no chance for the escape of the odors and foul air of the stable

above into the storage part of the barn. For all of the foul odors and impure air of the stable are carried out through the ventilating shaft into the open air. It certainly requires less labor to throw the bulky part of the ration, hay, straw, corn stalks, etc., down through feeding chutes into the feeding alleys below than it does to have to haul it in from another barn every day.

There is some difference of opinion as to the construction of the stable proper and the arrangement of the cow stalls. Some contend that the cows should face the center of the stable with a wide feeding alley so that one can drive through in front of the cows and carry in the feed. Others contend that the cows are best placed so that they will face the outside of the stable with a feeding alley on either side of the barn and with this driving alley in the center between the cows so that the manure can be readily loaded into the manure spreader or manure truck and drawn at once from the barn; and without any doubt this arrangement saves labor in caring for a dairy herd. If the stable is 36 feet wide, or more if desired, 36 feet will do, there can be two feeding alleys four feet wide in front of the cows on either side of the barn, and a wide enough drive way between the two rows of cows so that there is sufficient room for the manure spreader or manure trucks. In the disposing of the manure of a herd of dairy cows, is the greatest and most undesirable job around the dairy barn. Anything that will lessen the labor of properly caring for the manure, materially lessens the labor of caring for the dairy herd. With feeding alleys on the sides of the barn in front of the cows, the coarse fodder can be thrown from the storage part of the barn above directly into the feeding alley, which is done at less expense than it would be to draw it from a storage barn not connected with the stable. Where rows of cows face the center then you must have a wide space back of the cows if you drive through with a manure spreader or manure truck in cleaning the stable. The barn must necessarily be too wide for economy. With only a narrow alley back of the cows, the manure must be wheeled out or else carriers must be used; in either case with much more labor than where the manure is pitched directly into the manure trucks or spreader.

Then again, if the cows face the outside of the stable, their heads are in the right position to receive fresh air from the outside through the pure air intakes, which come in at the side of the barn. Where they face the center and are breathing into each others faces, cows are breathing over again the air exhaled by other cows. Taking everything into consideration, the health of the cows, the economy in the handling of the manure, and the economy of feeding, it is believed that this arrangement of the stable is the best that has yet been devised.

CONSTRUCTION WITH REGARD TO CLEANLINESS AND SANITATION.

First of all, a sanitary stable should be dry and free from outside moisture. To obtain this, the floor of the stable ought to be raised from eight to twelve inches above the surface of the outside ground. This gives perfect drainage and prevents any moisture from the outside seeping through the cement walls into the stable.

The floor of the stable should be cement. Wooden floors can be made dry and warm, but after a time they absorb the liquid manure

from the stable and become unsanitary, while a cement floor can be kept clean for any length of time and with the least labor. The walls of the stable can be constructed of different material; solid masonry, either stone or brick, hollow cement blocks, or wood. There are objections to stone and brick and to cement blocks. In the first place they are good conductors of heat. In the second place, it is almost impossible to keep a stable in cold weather free from condensed moisture when you have walls made of these materials. The warm air in the stable on the one side and the cold air on the other side, causes the condensation of moisture and makes the walls of the stable damp. The best material out of which to build the walls is wood. Suppose a stable constitutes the first story of the barn. The posts that hold up the superstructure can be set at convenient distances so that girders can be put in between them, then on the outside this should be double boarded with tarred paper between. On the inside all that is necessary is to sheet it up with matched lumber. This leaves a dead air space which is a poor conductor of heat and makes a warm and at the same time a dry stable practically free from condensed moisture. The floor above should be double boarded with tarred paper between. This not only saves the heat but it prevents any of the foul odors from the stable going into the storage part of the barn above. The stable should be ceiled on the lower side of the floor joist with matched lumber. By having the side walls and ceiling sheeted with matched lumber, it leaves the surface smooth so that there is no chance for the accumulation of dirt or cobwebs and it is easily kept clean. The gutters behind the cows, if gutters are used, should be constructed of cement as well as the floor so that they will not absorb the liquid manure and eventually become unsanitary. These gutters can be arranged if desired so that they can be flushed with water once in a while to keep them in a sanitary condition. If the proper amount of bedding can be used, however, the liquid manure is best absorbed by the bedding so that it can be removed with the solid excrements.

There can be no objection to cement floors for a cow stable if the cows are kept well bedded, so that when they lie down their udders do not come on the cold cement. If the best kind of cow stalls are used with sufficient bedding, the cow will always have a good bed of straw to lie upon and her udder will never come in direct contact with the cold floor. With a stable constructed in this manner, there is little difficulty in keeping it clean and in good sanitary condition, or keeping the cows clean so that a clean product may be produced.

WHITEWASHING.

All stables should be whitewashed at least twice each year—spring and fall—and some good disinfectant like carbolic acid, or better still, some kind of sheep dip be put into the whitewash. It is a good plan to use sheep dip freely in the stable quite often, say once a week. For applying whitewash, nothing is better than a good spray pump.

HEALTH AND COMFORT OF THE HERD.

More than ever before the health and comfort of the herd must be taken into consideration, because modern dairying differs radically from

the dairying of the past. Formerly cows were left out in the open a great deal of the time under what might be termed natural conditions, which contributed to their health and vigor. The modern dairyman, however, finds that these methods of caring for dairy cows do not bring him in the returns he desired and he must keep his cows under artificial conditions in order to get the desired profits from the business. No one will argue but what cows that are out of doors the most of the time are not as liable to have tuberculosis and other diseases as those confined in unsanitary barns; yet we cannot afford to leave the cows out of doors because if we do there is great loss in feed and production. Cows will yield considerable more milk if kept in a comfortable barn the most of the time during cold weather than when allowed to run in the open yard and they will consume less food. Consequently, it becomes necessary to make provisions for keeping them in the barn and the barn must be so constructed that the health and vigor of the animals will not be impaired. There is no reason why a cow cannot be kept in the barn where the temperature will not be below 40° at any time during the year and still have that cow remain healthy, if the barn is properly constructed. If you take a cow out of the pure air and sunlight and put her into a dark, damp, unventilated barn, you must expect that she will lose her physical vigor. This would be contrary to all the laws governing the health of animals. If the stable is well lighted and well ventilated, there can be no good reason why she should not be healthy indoors as well as out of doors. This idea would hold true with people as well as with animals. We might argue that people cannot live in houses and be vigorous and yet we know that if the houses are properly constructed, people do live almost constantly in houses, work from day to day in offices, with very little life in the open air, and still remain healthy. Dairy herds can be kept in barns almost constantly if proper consideration is given to the construction of the barn, for dairy cows yielding milk require little or no physical exercise. The influence of sunlight on animal life is well known. Where cows are kept in a barn for any considerable length of time, it is very essential that that barn should be well lighted. It needs plenty of windows. Windows on the south side of a barn do more good than on the north side as they give the direct rays of the sun, but windows should be provided if possible on all sides of the barn and plenty of them used. A dairy barn ought to be as well lighted as the living rooms of a house. A person ought to be able to read a newspaper in any part of a dairy barn in the day time. There can be no excuse for having a dark barn, because windows are nearly as cheap as other building material, and with very little effort on the part of the dairyman ample light can be provided which will assist materially in maintaining the health of the herd. Bacteria cannot live in the direct rays of the sun, and while it is impractical to bring the whole stable into direct sunlight, the lighter the barn is the fewer bacteria will there be. Consequently the danger from infectious diseases is very much reduced by having the dairy barn well lighted.

VENTILATION.

Ventilation is simply a change of air. When the air is taken into the lungs of the animal, a portion of the oxygen is used to purify the blood

and the residue, carbon dioxide or $C O_2$ is expelled from the lungs together with an uncertain amount of organic matter. Scientists are of the opinion that the organic matter expelled from the lungs of animals is more detrimental to the health of animals if inhaled even than the carbon dioxide. Carbon dioxide does not contain sufficient oxygen to maintain life, hence no animal can live for any considerable length of time in a close room. There must be a change of air, or ventilation.

Carbon dioxide is heavier than air and tends to settle to the floor of the stable. When exhaled from the lungs of animals it is inflated by heat and consequently lighter than in normal condition, and some of it is diffused through the air in the stable, but the tendency, nevertheless, is to settle to the floor of the stable. The colder air in the room also settles to the floor of the stable because it is heavier than the warm air, while the warmest air in the stable, which is also the purest air, rises to the ceiling. The problem of ventilation then is to get rid of the cold, impure air near the floor of the stable and save the warm pure air next to the ceiling. In ventilating living rooms in houses the saving of the warm air next to the ceiling is not so important because dwellings are supplied with artificial heat. In the cow stable we have no artificial heat and must depend wholly for warmth of the stable upon the heat generated by the bodies of the animals. We can get a change of air in the stable by lowering the windows at the top but we get a change of air then at the expense of the temperature of the stable, because when we lower the windows the warm air next to the ceiling passes out as cold pure air passes in. We can also ventilate the stable by using the hay chute which comes down from the storage part of the barn above through openings in the ceiling. This will give a change of air because the air of the stable coming in contact with the bodies of the cows is warmed, made lighter, and rises to the ceiling and goes out the hay chute and cold pure air comes in around windows and doors and through the very walls and ceiling of the stable itself if it can get in nowhere else, and takes the place of this warm air and that gives us a change of air or ventilation. But it is done at the expense of the temperature of the stable. This question of ventilation is one that does not concern us except in cold weather. In mild weather, or in summer time, when we have the windows and doors open almost constantly there is a free change of air and the question of ventilation is of little moment. In the winter time, however, in cold weather when we want to keep the stable warm at the same time we ventilate it, the problem is more perplexing.

The King system of ventilation solves this problem. Prof. King argues, and correctly too, that pure air should be admitted into the stable up next to the ceiling and the impure, or foul air, should be drawn off from the stable near the floor. He realizes, however, that if openings are made through the walls of the stable up near the ceiling that the warm pure air will pass out as the cold pure air comes in. But, however, if these holes were boxed in, as it were, and the box extended down on the outside of the barn to say within a foot of the ground, that the cold pure air could still come into the stable yet the warm air could not go out, because being lighter than cold air, it could not go down through a column of cold air. These openings are called pure air intakes and they should be of small dimensions rather than large to prevent draft and

should be numerous enough on all sides of the stable to supply a sufficient amount of pure air. If the pure air intakes are put in when the stable is being constructed instead of having a box on the outside, a flue can be constructed in the hollow wall which opens at the top on the inside of the stable and at the bottom on the outside. The cold impure air on the floor of the stable is removed by building at any convenient place in the stable, a ventilating shaft which is no more or less than a tall chimney. This is open at the bottom a foot from the floor and is built up through the stable, through the storage part of the barn and above the roof. The higher above the roof the better because the taller a chimney is the better it will draw. It should be made tight by double boarding with tarred paper between, because a good chimney is always a tight one. The fresh air from outdoors now comes in the pure air intakes and is gradually diffused or mixed with the warm pure air in the stable next to the ceiling and this forces a circulation. The cold impure air near the floor moves along the surface of the floor to the ventilating shaft and up this out of doors. Thus a constant change of air is taking place in the stable. This removes the foulest, most impure air in the stable and at the same time preserves the temperature of the stable.

CONCLUSION.

It is not necessary to construct expensive barns in order to have ideal cow stables. The ordinary barn on the average farm in the State of Michigan can, with very little expense, be remodeled so that it can be made into an ideal dairy barn. In most of the barns the stalls would have to be rearranged so the cows will face the outside in two rows. All stables can be made warm by properly ceiling them on the inside and double boarding with tarred paper between on the outside. Sufficient windows can be put in without any trouble at all. Cement floors can be put in so that the barns can be kept in a sanitary condition and the King system can be installed with very little expense. Any farmer who has any mechanical ingenuity about him at all can do the whole job himself, with no extra outlay of expense for hired help. There is nothing difficult about ceiling up stables on the inside or putting in windows. There is nothing difficult in putting in pure air intakes and in constructing the ventilating shaft so that the barn can be properly ventilated.

As has been intimated in this article, two things are sure to make this question of cow stable a very important one for dairymen in the near future. In the first place, the question of tuberculosis is an all important one. Whether we shall have a state law which compels dairymen to have their cows tested for tuberculosis or not, it is only a question of time when dairy herds will be tested universally for tuberculosis. This is a barn disease. Cattle that are brought up in the open air do not have it. Cattle when put into well ventilated and well lighted dairy barns will not contract it. There is little or no danger from keeping cattle almost constantly in the barn if the stable is only properly lighted and properly ventilated. You can eradicate tuberculosis among the dairy herds of the State of Michigan quicker by properly ventilating and properly lighting the cow stables than by any other means.

Then again, the question of clean dairy products is one that dairymen will be compelled to think about seriously. People are demanding better

articles of food. The time will come when milk produced from unhealthy cows and handled in unsanitary stables will not be allowed to be sold on the market. These two things will in the near future make the proper construction of dairy barns a question for the careful consideration of all dairymen.

FEEDING DAIRY COWS.

To obtain maximum profits from the dairy there is no one phase of the business more important than that of proper selection, and compounding of the feeds in the rations; and the time and manner of feeding them. Owing to the great difference in the individuality of cows, there are no hard and fast rules of feeding that will apply with equal force to all of them, nor is there any one ration that need necessarily be the best for all of them. But there are certain general principles that all who are striving to feed cows so as to produce the largest possible net profit should have in mind.

THE MAINTENANCE RATION.

While one cow may have the natural capacity to profitably convert a much greater amount of feed into milk, and while one cow may require more feed to maintain her than another, all cows require a considerable amount of feed to keep up their body heat, supply new tissue to take the place of that which is broken down, and to furnish the necessary energy to do their work. This will require from six to eight pounds of digestible nutrients per day, and it will take from 12 to 17 pounds of the feed of our ordinary air dry ration other than straw to supply these digestible nutrients. This 12 to 17 pounds we call the cows maintenance ration, and the value of it is what it costs just to run our milk machine. This is for a cow weighing a thousand pounds and a heavier cow will require more. The point we wish to make is that it costs us considerable just to run the machine, and if we get a profit from running it, we must furnish it enough feed to convert into milk so that the value of the milk will more than equal the cost of the food required to make it and the cost of running the machine.

FEED LIBERALLY.

After furnishing the food to run the machine (and we must do this or lose in cow value) manifestly it is wise to furnish that machine with something to do, and the man who makes the most profit from his dairy is the one who furnishes his cows with enough digestible nutrients to enable them to operate their milk giving machinery up to full normal capacity. The cow that for at least eight months after calving will not take a liberal ration and convert it into milk rather than wasting it or gaining much in weight is as a rule an unprofitable cow and should be disposed of. The greatest mistake being made by cow owners and feeders in Michigan is in not furnishing their cows with enough food. Many cows are given all the straw and corn stover they will eat, but there

is a difference between being fed or just filled up. After the cow subtracts from the digestible nutrients of a feed of straw the energy it took to digest it she has very little left. A cow can't eat and digest enough of even the best kinds of roughage alone to enable her to give anything like a full flow of milk for any great length of time. The average cow should have, in addition to all the good roughage she can consume, from six to eight pounds of good digestible concentrates, and many cows possessing dairy quality, will produce much more profitably on twice this amount. To get the best results, the feeder must know the ability of his cows and feed each individual up to her economical capacity. The sort of economy that prompts a man to withhold from his cows a liberal feed each day, is waste, waste of time, waste of feed, and waste of opportunity.

WINTER FEEDING.

Most of our best farmers have come to realize that the greatest profits come from winter dairying. One is usually not so crowded with other work and has more time to care for and milk his cows, it furnishes an income in the winter, the milk and butter is worth more per pound, and if the cow is well fed and cared for she will give more pounds of milk when freshening in the fall than in the spring. It requires a higher order of intelligence to make a decided success of winter dairying than of summer. One must have made some study of the feeding problem to be able to furnish his cows with an efficient and economical ration and he must know what she requires in the way of care.

WHAT TO FEED.

I believe the most valuable attribute of a liberal winter ration is palatability, *i. e.*, that it shall taste good to the cow. Provide such foods as good sweet ensilage, roots, early cut, well cured clover hay, corn fodder, and most of the good grains. Avoid over ripe hay, very dry or old corn stalks, very sour ensilage, and musty and mouldy grain. Furnish a variety of foods. All animals relish their food better and consume more of it when furnished a variety. Furnish them some succulent food. The best and cheapest form of succulence for winter feeding is ensilage. Very few who have six or more cows that give milk in the winter can afford to be without a silo. Lacking silage one should provide himself with roots, probably the large mangels are the most practical root to grow. The plant juice in the silage or roots is a natural tonic, stimulates digestion, it is also a laxative and keeps the animal's bowels in a good condition.

FEED A BALANCED RATION.

A balanced ration is simply a ration that contains all the elements that a cow needs to maintain herself and to make milk; and contains them in just the proportion that she needs them for this purpose. The principal elements that cows must have in their food are protein, carbo-hydrates, and fat. Our common cattle foods contain all these elements, but they generally do not contain them in the proportion that the cow needs them. They are lacking in protein and a cow consuming a full feed of them

would not get enough protein to enable her to give a maximum flow of milk.

Scientists, after years of experimenting, are able to tell almost exactly how much of these different elements an animal needs to maintain itself, and in the case of the dairy cow, how much more of each is required to enable her to produce different quantities of milk. Knowing the composition of our feed, and just how much of these different elements the animal requires, we are able to select our feeds so as to furnish the animals the elements they need in just the proportion they need them. The ration that would be just balanced for a cow giving ten pounds of milk a day, would not be properly balanced for a cow giving thirty pounds of milk a day. The more milk a cow gives and the richer that milk is, the more protein she needs in her ration in proportion to the carbo-hydrates. Dr. Jordan, an eminent authority on feeding animals, says: "A cow giving eleven pounds of four per cent milk requires eleven and nine-tenths pounds of digestible dry matter. This should contain one and six-tenths pounds protein, ten pounds carbohydrates and three-tenths of a pound fat. For twenty-two pounds of milk she would require two and one-half pounds of protein, thirteen pounds carbohydrates, one-half pound fat. For thirty pounds of milk, she would require three and one-half pounds protein, fourteen pounds of carbo-hydrates, four-fifths pound fat."

Prof. Jordan's estimate of the amount of protein required may be somewhat high, but it serves as a guide to the student or to the inexperienced feeder. We submit here a short table of the cow feeds most commonly used, showing the amount of digestible protein, carbo-hydrates and fat in a pound of each.

FEEDING TABLE.

| | Protein. | Carbo-hydrates. | Fat. |
|--------------------------|------------|-----------------|------|
| Wheat straw..... | .004 | .363 | .004 |
| Oat straw..... | .012 | .386 | .008 |
| Corn stalks..... | .017 | .328 | .007 |
| Timothy hay..... | .028 | .434 | .014 |
| Clover hay..... | .068 | .358 | .017 |
| Alsike clover..... | .084 | .425 | .015 |
| Corn silage..... | .009 | .113 | .007 |
| Mangels..... | .011 | .054 | .001 |
| Sugar beets..... | .011 | .102 | .001 |
| Oats..... | .092 | .473 | .042 |
| Corn..... | .079 | .667 | .043 |
| Wheat..... | .105 | .692 | .017 |
| Wheat bran..... | .122 | .401 | .034 |
| Wheat middlings..... | .128 | .530 | .034 |
| Buckwheat hulls..... | .02 | .279 | .006 |
| Buckwheat middlings..... | .22 | .334 | .054 |
| Gluten feed..... | .20 to .25 | .524 | .026 |
| Linseed meal..... | .27 to .29 | .327 | .07 |
| Cotton seed meal..... | .33 to .37 | .169 | .122 |

To illustrate, using a ration for a medium sized cow, giving a good flow of milk, let us take ten pounds of clover hay, and ten pounds of corn stalks, forty pounds corn silage, four pounds of gluten feed, and two pounds of cotton seed meal. Referring to the above table, we find these would contain the following digestible nutrients:

| | Protein. | Carbo- hydrates. | Fat. |
|--------------------------------|----------|---------------------|------|
| 10 pounds clover hay..... | .68 | 3.58 | .17 |
| 10 pounds corn stalks..... | .17 | 3.28 | .07 |
| 40 pounds corn silage..... | .36 | 4.52 | .28 |
| 4 pounds gluten feed..... | 1.00 | 2.09 | .10 |
| 2 pounds cotton seed meal..... | .7 | .33 | .24 |

This would make just about a balanced ration and would not only be theoretically right, but practically right as well, as thousands of the most successful dairymen of the country have proven by experience.

HOW TO FEED.

Feed regularly. Have a time to feed and feed at that time or just as near it as possible. The cow is a creature of habit naturally, and if you get her in the habit of expecting her feed at a certain time and then see to it that she gets it when she expects it, she will do a great deal better than with the hit and miss system of feeding. Keep the mangers clean. They should be swept out every day, so that there shall be no refuse matter to accumulate.

SUMMER FEEDING.

We ordinarily think of the matter of feeding dairy cows as furnishing them food in the winter season when there is no pasture to be had, but I am sure that the time is here when we must get away from the idea that the cow must depend entirely upon pasture during the whole summer. We can grow upon one acre put into corn as much food for the cow as three acres will furnish in pasture. We should have for our cows some pasture, but arrange to furnish her supplemental feeds. The amount of land we should devote to pasture depends largely upon individual conditions. If one has a large area of cheap land, or land that is rocky, uneven, and hard to till, or even more good land than he can well till, it may be good policy to furnish nearly, and perhaps some seasons, all the roughage the cows need, in the form of pasture. But upon high priced, tillable land, we can hardly ever afford to do this. In many places around the larger cities, the land is too valuable to pasture, and the owners of these lands keep their cows in the barn or a small yard and harvest the feed for them the year around. But as yet, nearly all our farmers have pasture fields that will supply sufficient rough feed for their cows through May and June. But if they have just a sufficient amount of pasture, for the cows to keep down well during this season, they will, as a rule, have a shortage later, and when that shortage comes, they should be sure to have something to feed to supplement it. Probably the cheapest and most convenient summer feed is silage. The summer silo should be small enough in diameter to feed at least one inch of silage off the surface each day, as silage exposed to the air will deteriorate much more rapidly in warm weather than in cold. Not having a silo, one may provide a succession of feeds from clover, peas, oats and sweet corn. Every dairyman should put in a generous amount of sweet corn. One can grow an immense amount of it to the acre, especially Stowell's evergreen. Cows like it and will eat it stalk and all. Give the cows all the supplementary feed they will eat up clean. Many dairy-

men are now feeding grain the year around and are satisfied that it pays them well to do so. The leading thought in summer feeding is to have some sort of feed at hand when the pasture gets so short that the cows cannot get a full feed without traveling too far, for the cow must have a full feed and without putting in all her time working for it, if she is to pay her owner the largest profit.

BUTTERMAKING.

Since the days of the dasher churn and milk pans the art of butter-making has been revolutionized, yet each year brings out some new ideas and different methods in the manufacture of creamery butter. The centrifugal separator has taken the place of the common milk pan and the later improved systems of deep setting and dilution processes of raising cream. The relegated milk pan which was usually concealed behind the kitchen stove during the winter months, and in the cellar through hot weather, gave our mothers no little trouble in making a marketable product. The exposed surface of the milk would become dry, which produced so called whitecaps in butter. With these, and with the flavors gathered from the kitchen of cooked vegetables and from mouldy cellars, an article of food was produced which was none too good in many instances. The method of deep setting was a decided improvement over the pan system and was much in favor in our first public creameries until the centrifugal separator came into general use. This system is still in favor on many farms at the present time. The principal objections to the use of this system are the extra amount of labor that it takes over the hand separator and the loss of butterfat unless plenty of ice is available.

IMPROVED MACHINERY.

The square box churn and the round butterworker which were formerly used in every creamery, have been set aside for the combined churn and butterworker, and the open vat has given way to the up-to-date cream ripener. Thus the inventor of creamery machinery has kept step in introducing improved machinery with the different methods that are being brought out for the improvement of creamery butter by the scientist, the chemist and the studious buttermaker.

COMMERCIAL STARTERS.

The introduction of pure cultures for ripening cream has proved successful in producing a fine flavor and uniformity of product, and should be used in every creamery. In fact, it is the one important feature in overcoming bad flavors which cream and milk are subject to. Propagated by pure lactic acid bacteria it requires the most careful handling to continue the use of the starter from day to day without deterioration; but if systematically done it requires but a small amount of extra labor or time.

THE MOTHER STARTER.

Select only the best milk for the mother starter. This milk can be divided in three different jars and sterilized at a temperature of 200° Fahrenheit in a small tank or oven. The sterilization process is repeated every day and whenever a jar is removed from the oven it is at once replaced by a new jar of fresh milk. If this is done regularly every morning, so as to have one jar that has been sterilized twice to the proper temperature, a perfectly sterile milk can be secured. Cool to about 70°, or as conditions may warrant, and add one of the commercial ferments now on the market. Two quart glass jars make a very good receptacle to carry the mother starter along in as the progress of coagulation can be observed and the experienced buttermaker can detect the quality by the appearance of the contents.

THE BASE OR BULK STARTER.

The base or bulk starter may be made from whole or skim milk. Select good milk, pasteurize to between 160° and 170°, hold for a short time and cool to 60° or 70° as conditions of milk may warrant. The next morning before commencing to skim, put the base or bulk starter into the ripener so it will become thoroughly mixed with cream when the skimming is through. Hold the cream at least three hours at 65° in the summer months and at 70° during cold weather before cooling down to the required churning temperature. Cream should not be cooled too soon after the starter is added if best results are to be obtained, as the ferment will be given no chance to overcome any bad flavors that may be present. The amount of starter used is considered very important and for the best results the more the better, especially for hand separator cream. At least twenty-five per cent should be used for this kind of material. The universal and intelligent use of starters, both in whole milk and gathered cream plants would improve the quality and uniformity of Michigan butter materially.

BEST METHOD OF HANDLING HAND SEPARATOR CREAM.

The increasing use of the hand separator has brought about conditions which require different methods for handling the cream, especially when produced at such a distance from the creamery as to be impractical to deliver oftener than once or twice a week. Very good results can be obtained by pasteurizing the cream, using a liberal per cent of starter, and churning at once. This method calls for the best judgment and skill of the buttermaker. The starter must receive the most careful attention for much depends upon this one feature when this method is used. When skillfully handled, this method will turn out a product which has good keeping qualities and sells in the markets as extra butter.

MOISTURE IN BUTTER.

The moisture content of butter which has received much attention in the past few years, should be of secondary consideration in the matter of buttermaking. Quality should be uppermost in the mind of every creamery man. He should use his skill intelligently and with moderation in incorporating enough moisture to insure a good commercial product.

CAUSE AND PREVENTION OF MOTTLES IN BUTTER.

Variations in temperatures are responsible for the production of wavy and mottled butter. When it becomes necessary to wash with water at a higher temperature than the cream was churned, the butter should be brought to an even temperature before salt is added or working commenced. No amount of working will get rid of mottles unless an even temperature is maintained. If the salt is dissolved in water before using it is no less important to have this water at the same temperature as the butter. Wetting the salt has the advantage that it will not be so apt to grind the grain of the butter and the working process may be finished at one working, while when drysalting, it is necessary to give the salt time to dissolve.

NEATNESS COUNTS.

The manner and appearance of packed butter is a very good advertisement for the maker. If the tubs are clean and neatly lined, the butter packed solid without holes and the top finished up smoothly, it impresses the buyer at once that the process of making has received careful attention. The careless looking lot of butter loosely packed in dirty tubs, covered with black finger marks and roughly finished on top, will be looked upon with suspicion by the commission man as a carelessly made lot, although it may be equally as good in quality. The appearance of the creamery also indicates something of the character which the butter-maker possesses. The Machinery and utensils may be clean, yet if rubbish is piled in nooks and corners, the windows dirty and cobwebs hanging from the ceiling, it creates a suspicion as to the thoroughness of the buttermaker's work. Cleanliness and thoroughness are essentials to even quality and uniformity.

THE ANALYSIS OF BUTTER IN THE CREAMERY.

There are several reasons why the buttermaker should know all possible regarding the product he manufactures. The first and paramount reason, of course, is because it is food product and he is a food manufacturer and as such he must cater to the best interests of his customers, the consumers. The best interests of the consumers requires a product high in food value, high in quality and perfect in workmanship. Another reason is that to maintain himself as a progressive manufacturer he must be able to produce butter of high quality, perfect workmanship and high food value, at a profit. The above two reasons stimulate the efforts of the buttermaker. The first reason is usually indicated to the buttermaker by the demand for the product or by the price for which it is sold. The second reason manifests itself in the dividends the creamery may declare.

The analysis of the butter in the creamery will tell the buttermaker considerable concerning the butter and will reveal the defects which cause a low price on the market. It will also reveal to him the factors working counter to his desire for a substantial profit. Early in the

spring of 1905, the Dairy and Food Department in obedience to the mandate of the law requiring the Commissioner to foster and encourage the dairy industries placed at the disposal of the buttermakers what have come to be known as the Rabild Overrun Test Tubes. These tubes were designed to furnish to the buttermaker information concerning his product which information would enable him to meet the requirements of the two reasons outlined above. Three years have elapsed since these tubes were placed at the disposal of buttermakers and they still furnish the most reliable information that can be had in the creamery, short of a complete chemical analysis which latter is of course out of the reach of most buttermakers. The overrun tubes furnish to the buttermaker the percentage of butter fat, matter not fat and the percentage of overrun. The butter fat and the matter not fat reveal to the buttermaker the food value, and in a measure the quality of his product. The overrun informs him whether he is producing that article at a profit and at the same time is a valuable indicator of the completeness of the removal of fat in the separator and in the churning process. The percentage of overrun as shown by the analysis should tally closely with the actual overrun as shown by the creamery books; any deviation should be an incentive to a careful investigation of each step. In manipulating the overrun tube, great care should be observed in securing the sample. It is well known to every buttermaker that a single churning of butter will vary very materially in different parts of the churning. To secure the sample therefore from the churn or tub let a small sample be drawn from different parts of the churn or tub, carefully melted in a pint, quart or two quart fruit jar with cover on until a semi-fluid condition is reached. The can and contents should then be thoroughly shaken until the product is quite solid. It is then uniform throughout and several test tubes may then be filled *full* with the butter. These tubes are then heated, placed in the centrifugal machine and rapidly rotated. Results obtained in this measure may be relied upon and the tubes used in this way will be found to yield much more valuable information than any so-called moisture tests now on the market. A butter containing the requisite content of butter fat *will not contain* excessive moisture and at the same time in noting the percentage of butter fat, the other points mentioned are observed without additional effort.

THE PROCESS OF CHEESE MAKING.

Only pure clean milk produced under clean conditions should be used. When the milking is done the milk should be removed from the stable where the atmosphere is pure, then strained, aerated and cooled to a temperature of at least 65 degrees. The patrons should be very particular about keeping the milk pails, strainer and milk cans in a cleanly condition. The milk should be delivered at the factory not later than 8:30 a. m. When the milk has been delivered and the cans filled with whey they should be taken home as soon as possible, the whey emptied and the cans immediately washed with luke warm water, using washing powder

and a brush to do the washing, then scalded, and put in the sunlight until used again. The cheese maker should be at the receiving stand when the first patron arrives, with a smile on his face and clad in clean clothes to greet his patrons, and not keep them waiting, as their time is limited for delivering milk to the factory. The maker should weigh all the milk and examine each can of milk as it is poured in the receiving can. He should not trust this to his helper, as he should know the condition of the milk received. Should he have a can of milk that in his judgment is not fit to produce a good product he should tell the patron kindly, but firmly, he cannot accept it—also explain why, and if necessary call on the patron the following evening before milking and do his utmost to locate the cause of the poor milk. Experience proves that by so doing the patron will become as much interested as the maker, and do all he can to produce good milk.

After the milk has all been weighed in, the receiving can and utensils should be thoroughly washed.

All cheese makers should have a good commercial starter which should be added to the milk soon after he commences to weigh in. The amount of starter to be used depends on the condition of the milk, as milk differs in quality in different locations—for this reason it is impossible to state exactly the amount of starter to be used, therefore, the maker must use his own judgment. Do not use less than 10 per cent but in some instances it may be necessary to use as high as 20 per cent.

The steam should be applied and the milk heated to a temperature of 86 to 88 degrees F. by the time the milk is all in the vat, being stirred while heating. Then use the acid test to determine the amount of acidity the milk contains. There are several acid tests on the market, probably the Acidimeter is the safest and most accurate. Ripen the milk enough so it will take from two and a half to three hours from setting until dipping, then add from one-half to three-fourths ounces of coloring per thousand pounds of milk, and from three and a half to five ounces of rennet extract per thousand pounds of milk, one-half ounce of color and four ounces of rennet being enough for normal milk. Good clean water should be used with the rennet for setting the milk.

When the curd will split clear from the finger it is ready to cut, which is done by using the perpendicular knife lengthwise and crosswise, then the horizontal knife lengthwise. The curd is then cut in cubes about one-fourth of an inch in size. All the curd should be removed from the sides of the vat carefully to prevent it from being injured, and stirred carefully with the hands around the vat, and the steam applied slowly until a temperature of 93 or 94 degrees Fah. is reached.

Then the rake may be used being cautious not to allow curd to adhere to the corners of the vat. It should take about fifty minutes to one hour from the time the curd begins to cook until a temperature of 98 to 100 Fah. is reached. This rule would apply to normal milk only. After the curd is heated to the proper temperature it should be kept stirred until the whey is removed and the curd placed in the drainer. This is the critical point in cheese making, to have the whey removed at the proper time, which is when the curd will string on the hot iron from one-sixteenth to one-eighth of an inch or shows from ten to fifteen hundred per cent acid by the Acidimeter. Then the whey should be immediately removed, the curd dipped on the racks in the drainer, and stirred over carefully until sufficiently dry enough for matting, then covered with a canvas cloth

made for that purpose, and left there to drain for twenty minutes. It should then be cut in strips six or seven inches wide and turned over. Turn, and pile often enough to keep the whey from collecting on the curd.

For Michigan cheese the curd should lie in the drainer until it will strip like the meat on a chicken's breast. It is then ready to mill which should be done with a knife mill as the spike mill tears the curd instead of cutting, therefore, producing a larger loss of fat. After the milling is done the curd should be stirred over and from one and a half to two pounds of salt per thousand pounds of milk be used, depending on the condition of the curd. The salt should be spread on in at least two separate coats, being mixed thoroughly in the curd, then left for twenty minutes or more and the curd put in the hoops with a pail to make the cheese uniform in size.

After pressing gently at first for three-quarters of an hour the dressing of the cheese may begin by removing the cap cloth and turning the bandage down, not having more than one inch of surplus left. Then place the cap on top of the bandage. Rinse the cap cloth in a pail of clean water and place over the cheese, pressing them until the following morning. The cheese will then be ready to put on the shelves. The dates should be stenciled on the cheese, and they should be turned each morning and kept clean.

The temperature in the curing room should be kept as near 65 Fah. as possible, especially in summer and fall.

For Michigan Cheddar cheese the curd should lay in the drainer until it will strip thin as paper, feel smooth and silky, also smell like fresh butter. The temperature should be kept up until it has matured sufficient for milling.

Continued piling will produce a more close and meaty texture, which is required for Michigan Cheddar. It is also necessary to use a trifle more salt for Michigan Cheddar.

Every maker should have a system by which he can refer to each day's make of cheese. In case he should have a poor batch he can then refer back to his record and possibly determine the cause.

Many factory owners are not considerate enough of their own interest to provide good buildings and utensils for the making and curing of a number one cheese. By neglecting to have an up-to-date factory and utensils in good condition they tend to discourage the makers and the result is careless and indifferent work, which always leads to poor quality.

It is a lamentable fact that many factory owners seem to care for nothing as long as the building will cover the machinery and cheese. They seem blinded at the penny at their feet and cannot see the dollar ahead of them. If they would furnish better buildings, better fixtures—such as presses, hoops, vats and drainers, etc., the cheesemakers would then be encouraged to keep the factory and utensils in a better condition.

A sample of each patron's milk should be taken, at least twice per week, and tested twice per month. The factory should be supplied with the best grade of furnishings, such as rennet, color, salt, in fact all supplies should be of the best quality. Then the maker should see that the making-room and utensils are painted each year and doors and windows screened, before the factory begins operation.

Every factory should be supplied with proper drainage, no waste water being allowed to go into the whey tank, as the whey when properly handled is very valuable for feeding purposes. The whey tank should be so constructed that it can be kept clean. Having the whey tank thoroughly clean, and the whey heated to a temperature of 160 degrees Fah. it will remain sweet until fed—the fat being evenly distributed in the whey. There is no doubt that much of the poor milk is caused by the filthy whey being carried home in the milk can. If the patrons, factory owners and cheesemakers would work in harmony along these lines, it would not be long before Michigan cheese would be second to none.

DAIRY MEETINGS.

During the fiscal year ending June 30, 1908, dairy meetings were held under the auspices of this Department or attended by a representative thereof, at the following places:

Alma, Gratiot County, July 25.
Ortonville, Oakland County, July 26.
Schoolhouse near Borculo, Ottawa County, July 30.
Almont, Lapeer County Pomona Grange, August 15.
Marlette, Sanilac County, Montgomery Grange, August 16.
Sunfield, Eaton County, August 22.
Omer, Arenac County, August 31.
Iron River Fair, Iron County, September 11.
Menominee County Fair, Menominee, September 12.
Rockford, Kent County, September 26.
Orleans, Ionia County, March 5.
Amble, Montcalm County, March 6.
Otsego, Allegan County, March 10.
Sebewa, Ionia County, March 11.
Allegan, Allegan County, March 11.
Grand Traverse Dairymen's Association, Traverse City, March 12.
Bloomingdale, Van Buren County, March 12.
Coloma, Berrien County, March 13.
Fowler, Clinton County, March 17.
Ransom, Hillsdale County, March 17.
Springport, Jackson County, March 18.
Remus, Mecosta County, March 19.
Avoca, St. Clair County, March 20.
Saranac, Ionia County, March 20.
Billings, Gladwin County, March 30.
Pearl, Allegan County, April 8.
Charlevoix, Charlevoix County, April 10.
Shelby, Oceana County, April 14.
Marlette, Sanilac County, April 14.
Pontiac, Oakland County, April 14.
Perrinton, Gratiot County, April 15.
Berlamont, Van Buren County, April 16.

Attica, Lapeer County, April 17.
Marion, Osceola County, April 18.
Charlotte, Eaton County, April 25.
Ontonagon, Ontonagon County, April 28.
Bark River, Delta County, April 30.
Powers, Menominee County, May 1.
Nadeau, Menominee County, May 2.
Hanover, Jackson County, May 9.
Deckerville, Sanilac County, May 21.
Burnips Corners, Allegan County, May 22.
Mancelona, Antrim County, May 27.
White Cloud, Newaygo County, May 28.
Williamsville, Cass County, June 4.
Alamo, Kalamazoo County, June 5.
Excelsior, Kalkaska County, June 9.
Mancelona, Antrim County, June 10.
Alba, Antrim County, June 10.
Clifford, Lapeer County, June 18.
Crooked Lake, Clare County, June 19.

GENERAL INSPECTIONS.

During the twelve months ending June 30th, 1908, the department inspectors visited 4,472 dealers in food products within the state and inspected the stock kept for sale by each one of them. They also inspected and reported on the sanitary conditions of 1,477 bakeries, 1,074 dairies and 510 creameries, cheese factories, etc.

INSPECTIONS. HOW REPORTED.

Inspections of creameries, cheese factories, farm dairies and city milk supply are reported in the monthly bulletins issued by the Department. By way of explanation the following pages are reprinted from a monthly bulletin. These bulletins, containing reports of inspections as shown on the pages reprinted, will be mailed to parties applying for same.

Inspection of

| Name. | Location. | Owner or manager. | Yearly milk receipts. | Make butter. | Sanitary surround- ing. |
|------------------------------------|--------------------|--------------------------|-----------------------|--------------|----------------------------|
| Arenac county, July: | | | | | |
| Standish Creamery..... | Standish..... | T. R. Burr..... | | 121,143 | Good... |
| Barry county, July: | | | | | |
| Nashville Creamery Co..... | Nashville..... | A. C. Siebert..... | | 72,000 | Good... |
| Bay county, July: | | | | | |
| Bay City Creamery..... | Bay City..... | T. R. Webster..... | | | Fair... |
| Berrien county, July: | | | | | |
| Three Oaks Creamery..... | Three Oaks..... | Jacobson & Becker..... | | | Good .. |
| Gallen Creamery Co..... | Gallen..... | E. A. Blakeslee..... | | | Good... |
| Buchanan Creamery..... | Buchanan..... | Harry B. Howe..... | | | Poor... |
| Niles Creamery..... | Niles..... | C. R. Smith..... | | | Good... |
| Hinchman Creamery Association..... | Hinchman..... | Fred C. Zeck..... | | | Fair... |
| Pipestone Jersey Creamery..... | Eau Claire..... | Geo. T. Yetter..... | | | Good... |
| Bishop Creamery Co..... | Glendora..... | C. & J. Bishop..... | | | Good... |
| Millburg Creamery..... | Millburg..... | J. J. Sturgeon..... | | | Good... |
| Calhoun county, July: | | | | | |
| Albion Creamery..... | Albion..... | Erik Demuth..... | | | Good... |
| Litchfield Butter Co..... | Homer..... | R. G. Washburn..... | | | Good... |
| Clinton county, July: | | | | | |
| Clinton Creamery Co..... | St. Johns..... | J. Mosher..... | | | Fair... |
| Fowler Creamery Co..... | Fowler..... | Fred L. Pasch..... | 20,336,623 | 78,243 | Fair... |
| Eaton county, July: | | | | | |
| A. M. Smith & Co..... | Eaton Rapids..... | A. M. Smith & Co..... | | | Good... |
| Vermontville Creamery..... | Vermontville..... | H. W. Weber..... | | | Good... |
| Genesee county, July: | | | | | |
| Fenton Creamery..... | Fenton..... | Leonard Creamery..... | | | Good... |
| Huron county, July: | | | | | |
| Lakeside Creamery..... | Grindstone..... | F. Kinch..... | | 240,000 | Good... |
| Ruth Creamery Co..... | Ruth..... | Peter Schmitt..... | | | Fair... |
| Kinch Creamery Co..... | Kinde..... | Frank Kinch..... | | | Fair... |
| Elkton Creamery..... | Elkton..... | W. T. Leonard..... | | 114,500 | Fair... |
| Harbor Beach Creamery..... | Harbor Beach..... | Frank Kinch..... | | | Fair... |
| American Farm Products Co..... | Bad Axe..... | M. Conaton, Jr..... | | | Fair... |
| Ionia county, July: | | | | | |
| Orleans Creamery Association..... | Ionia..... | Chris. Liebum..... | 1,473,643 | 6,000 | Good... |
| Saranac Creamery..... | Saranac..... | C. Romander..... | | 125,000 | Fair... |
| Jackson county, July: | | | | | |
| Springport Creamery Co..... | Springport..... | J. T. Bancroft..... | | | |
| Kent county, July: | | | | | |
| Rudell Creamery..... | Cedar Springs..... | F. G. Clark..... | | | Good... |
| Michigan Dairy Farm Co..... | Cedar Springs..... | C. L. Garrison..... | | | Good... |
| Macomb county, July: | | | | | |
| Cady Milk Depot..... | Cady Corners..... | Detroit Creamery Co..... | | | Good... |
| Springer Milk Depot..... | Warren..... | Frank Springer..... | | | Good... |
| Hertag Milk Depot..... | Warren..... | Wm. Hertag..... | | | Good... |
| Cottage Grove Milk Depot..... | Centerline..... | A. W. Flick..... | | | Good... |

| Name. | Location. | Owner or manager. | Yearly milk receipts. | Milk cheese. | Style. |
|-----------------------------------|--------------------|-------------------------|-----------------------|--------------|------------------------|
| Arenac county, July: | | | | | |
| County Line Factory..... | Standish..... | M. Siedel..... | | | Daisies and Flats.... |
| Genesee county, July: | | | | | |
| Elba Cheese Factory..... | Elba..... | L. Freeman Co..... | | | Daisies..... |
| Richards Cheese Factory..... | Flint..... | D. W. Richards..... | | | Soft Michigan..... |
| Swarts Creek Factory..... | Swarts Creek..... | Milford Cheese Co..... | | | Daisies and Soft Mich |
| Fenton Cheese Factory..... | Fenton..... | Leonard Freeman Co..... | | | Cheddar..... |
| Grand Blanc Cheese Factory..... | Grand Blanc..... | Leonard Freeman Co..... | 1,100,000 | | Soft Michigan..... |
| Fenton Cheese Factory..... | Fenton..... | Leonard Freeman Co..... | 1,948,895 | | Daisies..... |
| Lapeer county, July: | | | | | |
| Columbiaville Factory..... | Columbiaville..... | Leonard Freeman Co..... | | | Daisies and Cheddar.. |
| Oakland county, July: | | | | | |
| N. Farmington Factory..... | N. Farmington..... | M. B. Armstrong..... | | | Michigan..... |
| Farmington Cheese Factory..... | Farmington..... | F. M. Warner Co..... | 1,542,000 | 124,230 | Michigan..... |
| Saginaw county, July: | | | | | |
| Brant Cheese Factory..... | Brant..... | T. A. Cook..... | 885,000 | 88,900 | Soft Michigan..... |
| Chapin Cheese Co..... | Chapin..... | Geo. Peters..... | | | Soft Mich. and Daisies |
| South Branch Cheese Factory..... | South Branch..... | Jo. Rathbun..... | | | Michigan..... |
| Flint River Cheese Factory..... | Fosters..... | J. C. Malone..... | | | Soft Michigan..... |
| Tuscola county, July: | | | | | |
| Mayville Cheese Factory..... | Mayville..... | J. F. Cartwright..... | 2,001,570 | 200,369 | Flats..... |
| Tuscola Cheese Factory..... | Tuscola..... | G. W. Dimond..... | 1,281,500 | 128,145 | Soft Michigan..... |
| Silverwood Cheese Factory..... | Silverwood..... | A. L. Rice..... | 1,455,852 | 144,526 | Daisies..... |
| Akron Cheese Factory..... | Akron..... | Mallory Bros..... | | | Soft Michigan..... |
| Fostoria Cheese Factory..... | Fostoria..... | E. Robinson..... | 1,109,700 | 99,000 | Michigan..... |
| Clinton county, August: | | | | | |
| Bannister Cheese Factory..... | Bannister..... | M. S. Doyle..... | | | Daisies..... |
| Hillsdale county, August: | | | | | |
| Dowd's Cheese Factory..... | Addison..... | M. C. Dowd..... | | | Soft Michigan..... |
| Lenawee county, August: | | | | | |
| Addison Cheese Factory..... | Addison..... | Central Supply Co..... | | | Soft Michigan..... |
| Bennett Cheese Factory..... | Hudson..... | O. F. Foster..... | | | Soft Michigan..... |
| North Morenci Cheese Factory..... | N. Morenci..... | C. C. Colvin..... | | | Soft Michigan..... |
| Sand Creek Cheese Factory..... | Sand Creek..... | Geo. B. Horton..... | | | Soft Michigan..... |
| Bimo Cheese Factory..... | Bimo..... | G. B. Horton & Son..... | | | Soft Michigan..... |
| Munson Cheese Factory..... | Munson..... | G. B. Horton & Son..... | | | Soft Michigan..... |
| Jasper Cheese Factory..... | Jasper..... | G. B. Horton & Son..... | | 250,000 | Soft Michigan..... |
| Medina Cheese Factory..... | Medina..... | C. C. Colvin & Son..... | | | Soft Michigan..... |
| Lime Creek Cheese Factory..... | Lime Creek..... | O. F. Foster..... | 1,910,236 | 192,318 | Soft Michigan..... |
| South Dover Cheese Factory..... | South Dover..... | F. O. Foster..... | | | Soft Michigan..... |
| Pittsford Cheese Factory..... | Pittsford..... | G. B. Horton & Son..... | | | Soft Michigan..... |
| Canandaigua Factory..... | Canandaigua..... | C. C. Colvin & Son..... | | | Soft Michigan..... |
| Clayton Cheese Factory..... | Clayton..... | G. B. Horton & Son..... | | | Michigan..... |
| Fairfield Cheese Factory..... | Fairfield..... | G. B. Horton & Son..... | | | Michigan..... |
| Weston Cheese Factory..... | Weston..... | Baker & Jordan..... | | | Michigan..... |
| Nile Cheese Factory..... | Fairfield Twp..... | | | | Michigan..... |
| Shiawassee county, August: | | | | | |
| Byron Cheese Factory..... | Byron..... | Leonard Freeman..... | | | Cheddar..... |
| Perry Cheese Co..... | Perry..... | Leonard Freeman..... | | | Cheddar..... |

Cheese Factories.

| Cheesemaker. | Sanitary surroundings. | Equipment. | | | | | | Quality of milk. | Starter. |
|----------------------|------------------------|-------------|----------|------------|------------|--------------|---------|------------------|-------------|
| | | Vats. | Presses. | Card mill. | Whey tank. | Rennet test. | Boiler. | | |
| E. Gorton..... | Good... | 2, good... | | | | No.... | 10 HP.. | Good... | No. |
| Myers Sines..... | Good... | 2, good... | 1 | | Good... | No.... | | | Natural. |
| John P. Kaifer..... | Good... | 2, clean... | 2 | | | No.... | | Fair... | No. |
| Ray G. Eno..... | Fair... | 2, clean... | 2 | | Poor... | No.... | | Good... | No. |
| Emil Folk..... | Good... | 3, good... | 2 | | Fair... | | 15 HP.. | Fair... | Natural. |
| W. W. Thompson..... | Good... | 2, clean... | 1 | | Clean... | No.... | | Good... | Natural. |
| Emil Falk..... | Good... | 3, clean... | 3 | | Good... | No.... | 20 HP.. | Good... | Artificial. |
| William W. Reed..... | Good... | 2, clean... | | | Clean... | No.... | 12 HP.. | Fair... | Artificial. |
| A. B. Greer..... | Good... | 2, fine.... | 1 | | Good... | No.... | 12 HP.. | Good... | No. |
| N. Leenlohr..... | Fair... | 2, clean... | 1 | | | | 10 HP.. | Good... | Yes. |
| T. A. Cook..... | Fair... | 1, clean... | 1 | No.... | Good... | No.... | 8 HP.. | | No. |
| Geo. Peters..... | Poor... | 3, clean... | 2 | | Poor... | No.... | 10 HP.. | Good... | No. |
| J. F. Fuller..... | Poor... | 1, clean... | 1 | | | No.... | 8 HP.. | Poor... | No. |
| J. McCormick..... | Good... | 2 | 1 | | | No.... | 65 HP.. | Good... | No. |
| John Louts..... | Good... | 5, good... | 2 | | | No.... | | | Yes. |
| Alvin Hustler..... | Good... | 3, good... | 2 | | | No.... | 8 HP.. | Good... | No. |
| E. Rice..... | Fair... | 3 | | | | No.... | 12 HP.. | Good... | Artificial. |
| A. P. Folta..... | Good... | 2, good... | 2 | No.... | Good... | No.... | 8 HP.. | Good... | Natural. |
| W. C. Ellis..... | Good... | 2, good... | 1 | | | No.... | 8 HP.. | Good... | No. |
| John Gardham..... | Good... | 2, clean... | 2 | | Good... | No.... | 15 HP.. | Good... | Natural. |
| M. C. Dowd..... | Good... | 2 | 2 | None... | Clean... | No.... | 8 HP.. | Good... | No. |
| F. D. Smith..... | Good... | 2, clean... | 2 | None... | | | 10 HP.. | Good... | Natural. |
| Mr. Hinchley..... | Good... | 4, clean... | 2 | None... | Good... | No.... | 12 HP.. | Good... | No. |
| L. Keenan..... | Good... | 2, good... | 2 | None... | | No.... | 10 HP.. | Good... | Whey. |
| Allen Hoffman..... | Poor... | 2, clean... | 2 | No.... | | No.... | 10 HP.. | Good... | Natural. |
| Joseph Hill..... | Poor... | 2 | 2 | | None... | No.... | 8 HP.. | Good... | Natural. |
| Chas. Spencer..... | Good... | 2, clean... | 2 | None... | | No.... | 4 HP.. | Good... | Natural. |
| James Befner..... | Good... | 3 | 2 | No.... | | No.... | 20 HP.. | Good... | Yes. |
| Fred Bryan..... | Good... | 2, clean... | 2 | No.... | | No.... | 15 HP.. | Good... | Whey. |
| E. M. Dewey..... | Fair... | 3, clean... | 2 | No.... | Fair... | No.... | 10 HP.. | | Whey. |
| Roy Porter..... | Good... | 2, new... | 1 | No.... | | No.... | 6 HP.. | | Whey. |
| L. J. Dillon..... | Good... | 2, clean... | 3 | | Clean... | No.... | 8 HP.. | Clean... | Sour milk. |
| Austin Gouls..... | Poor... | 2, fair... | 2 | No.... | Poor... | No.... | | | Natural. |
| W. C. Burger..... | Good... | 2, clean... | 2 | No.... | | No.... | 10 HP.. | Good... | Whey. |
| Jay Mason..... | Fair... | 2, fair... | 2 | No.... | | No.... | 10 HP.. | Good... | Sour milk. |
| A. C. Baker..... | Good... | 3, good... | 2 | No.... | | No.... | 6 HP.. | Good... | Whey. |
| T. B. Jurden..... | Good... | 3, good... | 2 | | | No.... | 10 HP.. | | Sour milk. |
| G. A. Hurst..... | Good... | 3, fine.... | | | Good... | | 12 HP.. | Good... | Artificial. |
| Garr Glaeser..... | Good... | 2, good... | | | Fair... | | 10 HP.. | Good... | Natural. |

| Name. | Postoffice. | Patron of. | Total No. of cows. | No. of cows giving milk. | Daily production of milk in pounds. | Breed. |
|-----------------------------------|------------------|--------------------------------|--------------------|--------------------------|-------------------------------------|----------------------|
| Berrien county, July: | | | | | | |
| A. W. Holester..... | Galien..... | Galien Creamery..... | 5 | 5 | 75 | Natives..... |
| Genesee county, July: | | | | | | |
| D. W. Richards..... | Flint..... | Richards' Factory..... | 38 | 35 | 600 | Durham grades... |
| Oakland county, July: | | | | | | |
| Geo. Seeley..... | Farmington..... | F. M. Warner's Factory..... | 17 | | 320 | Mixed..... |
| C. H. Ely..... | Farmington..... | E. M. Warner's Factory..... | 13 | 9 | 400 | Holstein..... |
| Tuscola county, July: | | | | | | |
| Boardman & DuBois..... | Vassar..... | City Milk Supply..... | 27 | 25 | 260 | Mixed with Jersey. |
| A. J. Valentine..... | Akron..... | Akron Factory..... | 4 | 4 | 90 | Jersey & mixed. |
| Genesee county, August: | | | | | | |
| Andrew Sweitzer..... | Flint..... | City Retail Trade..... | 25 | 20 | 400 | Grades..... |
| J. Cotes..... | Flint..... | City Retail Trade..... | 25 | 19 | 300 | Grades..... |
| Lenawee county, August: | | | | | | |
| Chas. Rom..... | Weston..... | Weston Cheese Factory..... | 10 | | 300 | Grades..... |
| J. B. Tenbrook..... | Jasper..... | Jasper Cheese Factory..... | 7 | 7 | 173 | Jersey and grades.. |
| C. T. Clement..... | Jasper..... | Jasper Cheese Factory..... | 29 | 27 | 635 | Grades..... |
| Del Delano..... | Jasper..... | Jasper Cheese Factory..... | 10 | 10 | 240 | Grades..... |
| E. T. Cole..... | Jasper..... | Jasper Cheese Factory..... | 12 | 12 | 300 | Holstein..... |
| Gus Misner..... | Fruit Ridge..... | Horton's Home Factory..... | 30 | 29 | 700 | Grades..... |
| Frank Mann..... | Jasper..... | Jasper Cheese Factory..... | 14 | 14 | 300 | Mixed grades..... |
| H. B. Carpenter..... | Fruit Ridge..... | Horton's Home Factory..... | 4 | 4 | 80 | Natives..... |
| W. H. Wiggins..... | | Jasper Cheese Factory..... | 10 | 10 | | Mixed..... |
| F. J. Hoadley..... | Adrian..... | Horton Cheese Factory..... | 9 | 9 | 200 | Holstein grades..... |
| H. Williams..... | Fruit Ridge..... | Horton Cheese Factory..... | 12 | 11 | 200 | Mixed..... |
| Saginaw county, August: | | | | | | |
| F. R. Bender..... | Saginaw..... | City Milk Supply..... | 8 | 8 | 160 | Grades..... |
| Thomas Phoenix..... | Saginaw..... | City Milk Supply..... | 20 | 17 | 180 | Grade Durham..... |
| Geo. Hunsberger..... | Saginaw..... | Makes Butter, Sells cream..... | 9 | 7 | 180 | Grades..... |
| Henry Yeomans..... | Saginaw..... | Heiman Berkhart..... | 21 | 19 | 320 | Mixed grades..... |
| Allegan county, September: | | | | | | |
| J. R. Tanner..... | Allegan..... | Monterey Skimming Station..... | 6 | 6 | 36 | Jersey and grades.. |
| C. A. Simpkins..... | Hopkins..... | Riverside Cheese Factory..... | 4 | 4 | 120 | Grade Holstein..... |
| Chas. Hart..... | Hopkins..... | Monterey Skimming Station..... | 8 | 7 | 126 | Grades..... |
| Chas. Durgee..... | Allegan..... | Hopkins Creamery..... | 4 | 3 | 50 | Grades..... |
| Hattie Sabin..... | Allegan..... | Monterey Skimming Station..... | 5 | 5 | 50 | Mixed..... |
| Simon Kerns..... | Hopkins..... | Monterey Skimming Station..... | 8 | 4 | 45 | Grades..... |
| S. K. Tanner..... | Allegan..... | Monterey Skimming Station..... | 2 | 2 | 14 | Jersey grades..... |
| Barry county, September: | | | | | | |
| Clark E. Onersmith..... | Morgan..... | Nashville Creamery..... | 4 | 4 | 24 | Grades..... |

Farm Dairies.

| Ration. | Stable. | | Cows kept clean. | Water. |
|---|---------------------------|----------|------------------|-----------------|
| | Ventilation. | Light. | | |
| Stalks, hay..... | | No..... | | Creek. |
| Coarse fodder, hay, bran, corn, oats..... | Doors, windows..... | Yes.... | Yes.... | Tubular well. |
| Bran, oats, barley..... | Doors, windows..... | No..... | Yes.... | Creek. |
| Bran, corn, oats..... | Doors, windows..... | Yes.... | Yes.... | Drive well. |
| Bran, corn..... | Doors, windows..... | Yes.... | Yes.... | Tubular well. |
| Corn meal, oats..... | None provided..... | No..... | Yes.... | Flowing well. |
| Hay, corn fodder, corn, oats, barley..... | | Yes.... | | Tubular well. |
| Hay, corn fodder, oats, unhusked corn..... | Hay chute..... | No..... | Yes.... | Tubular well. |
| Clover hay, corn fodder, corn bran..... | | No..... | Yes.... | Open well. |
| Corn fodder, clover hay, oats, corn..... | Open into barn floor..... | No..... | No..... | Tubular well. |
| Corn fodder, clover hay, corn, cobmeal, oats..... | Windows, doors..... | Fair.... | Yes.... | Well and creek. |
| Corn fodder, oats, corn..... | Trap door..... | Yes.... | Yes.... | Creek and well. |
| Corn fodder, clover, corn, ground oats..... | To barn floor..... | Fair.... | Yes.... | Creek. |
| Corn fodder, clover hay, oats, corn..... | Hay loft..... | Fair.... | Yes.... | Springs. |
| Corn fodder, corn, oats..... | Cracks in wall..... | Yes.... | Yes.... | Tubular well. |
| Coarse fodder, hay, corn..... | Doors..... | No..... | Yes.... | Springs. |
| Coarse fodder, hay..... | None provided for..... | No..... | Yes.... | Creek. |
| Coarse fodder, hay, corn meal..... | Doors, windows..... | No..... | Yes.... | Tubular well. |
| Coarse fodder, hay..... | Windows, doors..... | No..... | Yes.... | Tubular well. |
| Hay, corn fodder, gluten..... | Doors, windows..... | Yes.... | Yes.... | City. |
| Silage, hay, gluten feed..... | Loft..... | Yes.... | Yes.... | Tubular well. |
| Hay, corn fodder, cotton seed meal, gluten..... | Hay chute, stairway..... | Yes.... | Yes.... | Open well. |
| Corn fodder, hay, corn, oats..... | Barn floor..... | Yes.... | Yes.... | Pond. |
| Corn fodder, hay, oats, corn, oilmeal, bran..... | Doors, windows..... | No..... | | Drive well. |
| Fodder, hay, oats, corn, bran..... | Open front and loft..... | Fair.... | Yes.... | Flowing well. |
| Fodder, hay, oats, corn..... | Door, windows..... | Fair.... | | Drive well. |
| Shredded fodder, hay, oats, corn, bran..... | Doors, cracks..... | No..... | | Flowing well. |
| Fodder, hay, oats, corn..... | Doors, cracks..... | No..... | | Open well. |
| Fodder, hay, oats, corn..... | Doors, windows..... | Fair.... | | Well and creek. |
| Fodder, hay, oats, corn, oilmeal, bran..... | Doors, windows..... | No..... | | Drive well. |
| Fodder, corn..... | Doors, windows..... | Fair.... | | Drive well. |

STATE OF MICHIGAN.

Inspection City Milk Supply.

| Name. | Health of herd and its protection. | Cleanliness. | Construction and care of utensils. | Health of employees and manner of milking. | Handling of milk. | Total. | Sanitary conditions. | Quality of milk. | | | |
|-----------------------|------------------------------------|--------------|------------------------------------|--|-------------------|--------|----------------------|----------------------|-------------|------------------------|--------------------------|
| | | | | | | | | Butter fat per cent. | Lactometer. | Total solids per cent. | Solids not fat per cent. |
| Standish, July: | | | | | | | | | | | |
| A. Steinmets..... | 94 | 92 | 88 | 80 | 90 | 444 | Good..... | | | | |
| Birmingham, July: | | | | | | | | | | | |
| Stanley Todd..... | 90 | 55 | 84 | 95 | 95 | 419 | Medium..... | 4.1 | 33 | 12.9 | 8.8 |
| Chas. L. Parks..... | 80 | 55 | 86 | 87 | 80 | 368 | Poor..... | 3.9 | 32.5 | 12.9 | 9 |
| Geo. Hupp..... | 96 | 93 | 86 | 100 | 93 | 468 | Good..... | 4 | 32.5 | 12.92 | 8.92 |
| Akron, July: | | | | | | | | | | | |
| C. H. Albertson..... | 84 | 84 | 93 | 89 | 85 | 431 | Medium..... | 3.5 | | | |
| Niles, August. | | | | | | | | | | | |
| Oscar Wyant..... | 78 | 73 | 79 | 90 | 90 | 410 | Poor..... | 4.2 | 31 | 12.76 | 8.56 |
| H. S. Young..... | 91 | 85 | 77 | 96 | | | Fair..... | | | | |
| Geo. Guska..... | 91 | 76 | 84 | 91 | 78 | 420 | Medium..... | 4.1 | 29.7 | 12.82 | 8.22 |
| M. E. Harger..... | 97 | 91 | 82 | 96 | 84 | 450 | Good..... | 4.6 | 30 | 13.02 | 8.42 |
| Philip Smith..... | | | 87 | 96 | 74 | | | | | | |
| Chas. Sinsheimer..... | 94 | 96 | 92 | 96 | | | Good..... | | | | |
| Three Rivers, August: | | | | | | | | | | | |
| Frank Hunter..... | 91 | 80 | 74 | 87 | 44 | | Poor..... | 4.2 | 30 | 12.82 | 8.32 |

STATE ANALYST'S REPORT.

LETTER OF TRANSMITTAL.

Hon. A. C. Bird, Michigan Dairy and Food Commissioner:

Dear Sir—Permit me to submit herewith my report as State Analyst for the year ending June 30, 1908.

This year has been one of unusual activity in the Department laboratory, due to the increased work which has come to us as a result of the Department's aggressiveness in investigating the food supply of the state. Considerable of the time has been spent in special work, in order that the Department might meet in the courts the activities of certain commercial interests. This experimental work has been in addition to the regular routine work of the Department.

During the year, there have been examined in the Department laboratory 1,188 samples of food products, 766 of which have been passed as not found adulterated, and 422 condemned as adulterated, or not in conformity with the statutes of the state. An inspection of the tabulated analyses, or the summary following, will give you some idea of the great variety of the products examined. From an inspection of the summary, it will be seen that the products which exhibit the greatest lack of conformity are flavoring preparations. Out of 194 samples of flavoring preparations, 109 were condemned as adulterated. While a number of these were lemon extracts, a great many were labeled imitation vanilla extracts, synthetic preparations flavored with vanillin, a derivative of cold tar, and colored with caramel to imitate the natural color of vanilla extracts. Many of the lemon extracts were classed under what is known as the so-called Terpeneless extracts. The supreme court has decided that a Terpeneless extract may be sold in the state, provided it equals in strength the regular Pharmacopoeia extract, or in other words, provided it equals in strength an extract made by a solution of five per cent oil of lemon in strong alcohol. A great majority of the so-called Terpeneless extracts on the market which have been examined, do not contain the flavoring properties of a five per cent oil of lemon extract, and it is on this ground that most of these products have been condemned.

Much difficulty has again been experienced in preventing the misbranding of mixtures of sugar syrup and maple syrup. With but few exceptions, we have not found a single mixture of sugar syrup with maple syrup in which the maple syrup constitutes any considerable portion of the mixture. The trade seems to persist in accepting the slightest trace of maple in a mixture as a sufficient cause for printing the words "maple syrup" on the label.

Early in the year, in the city of Grand Rapids, the Department

brought suit against a local milk dealer for retailing milk from which the laboratory evidence showed a considerable portion of the butter fat had been removed. The result of this prosecution, held in the police court in the city of Grand Rapids, was an acquittal, by jury, of the man charged with the crime. The ultimate outcome of this acquittal was a suit for damages instituted by the previous defendant against the Department Inspector taking the sample, the deputy making the complaint and the milk and meat inspector of the city of Grand Rapids, who acted merely as a witness in securing the sample. The Department was represented in the court by Mr. T. A. Lawler, of the Attorney General's Department, and after hearing the argument of the plaintiff in the case and before the state had put in any defense whatsoever, on motion of Mr. Lawler, Judge Perkins dismissed the case under the caption, no cause for action. In giving his opinion dismissing the case, the judge remarked that from the nature of the evidence before him at that time, the plaintiff might easily have been found guilty in the lower court of the original crime of skimming the milk.

During the last three years, the Department has been almost constantly under a restraining order of some nature by the courts. If it were not a stock food case, it was a maple syrup case, or a sausage injunction suit. One following the other, has kept the order of the court almost continually hanging over this Department. This serves to show within what narrow limits the Department must keep in enforcing the food law, as the special interests lose no time in applying for a restraining order or injunction when they think their products are being discriminated against. In reality, such action reveals a very desirable condition of affairs, for it assures the business interests of the state that they have redress against possible arbitrary rulings or interpretations of the law by the Dairy and Food Department. That such rulings and interpretations have been founded upon real merit and are not in any sense arbitrary may be deduced from the fact that these injunctions, one after another as they have come to trial upon their merits, have been dissolved by the courts. I am bringing this to your attention for one purpose only, and that is to show that we really appreciate the seriousness of the accusation of crime against any individual or interest. That it means more to that individual than a mere business transaction we are fully aware, and if without sufficient foundation in fact, we were to commence proceedings in the court against an individual or corporation, not only would the interests of the consumer be not conserved, but the good reputation of the persons involved would be damaged beyond repair. It is with these points in view that the laboratory has used exceptional precautions to prevent an erroneous report being sent out. The dissolution of the injunctions and restraining orders heretofore mentioned shows what success has attended the Department's efforts in this respect.

Permit me to again call your attention to a method of laboratory procedure reported to you in a previous letter of transmittal, to-wit: June 30, 1906, the policy of dividing the laboratory work into what we have chosen to call *official* and *unofficial* work. Some erroneous opinions have been promulgated throughout the state recently regarding this procedure. The term "unofficial" was used merely as a laboratory classification of a certain class of samples sent to the Department, viz.:

samples sent largely by persons other than regular official inspectors. You will recall that when an inspector takes a sample under authority of the Dairy and Food laws, that a certain definite procedure is required of him, in order that the records of the case may be clear in the event of the matter reaching the court. Samples taken in this way by a regular inspector are termed "official samples" as a mere matter of designation and in order to separate them from a multitude of other samples that reach the laboratory. This so-called official work is by no means all the work performed in the laboratory, but very frequently a retailer or a jobber living within the state desires to know if the product he is handling, and thereby under the law responsible for its purity, is in conformity with the statutes of the state. To refuse to convey this information in some form or other to the retailer or jobber, or to the consumer, when he requests it, is to deny him the privilege of knowing that he is obeying the law. We consider this a very important part of our work and it has been very rapidly extended during the last year. A milk dealer, or a farmer, desires to know if the milk he sells, as produced directly from the cow, conforms to the state standard for butterfat, for example. This department makes an effort to give this information to the dairyman. A great variety of work of a similar nature comes to the laboratory under such a classification as this last. To distinguish it from the regular work of the Department, we have called this class of samples "unofficial samples." They are samples upon which a prosecution is never based, although it may be that they are taken for the purpose also of having greater opportunity to study some specific adulteration. I think this will make clear the real significance, from the laboratory standpoint, of the terms official and unofficial.

In addition to the regular work relating to food and drinks, the laboratory has also spent considerable time in the analysis of the commercial feeding stuffs, required by the law. These analyses included a great many samples that were sent in by the inspectors from the various mills of the state, which samples were examined mainly as to purity, for example, brans, middlings and other mill products which are expressly exempted from the provisions of the feeding stuffs law, provided they are in a pure state.

Also in addition to these, the laboratory has conducted the analysis of the butter sampled each month at the educational scoring contest conducted by the Department. This has involved the analyses of possibly some thousand samples of butter, the results of which analyses are submitted with this report.

Beginning with the first of July and closing with the 15th of September, the Department conducted a special investigation or study of the quality of the milk supply of a number of the cities of the state. Ypsilanti, Ann Arbor, Grand Rapids, Muskegon, Jackson and Lansing were studied and much information gained concerning the quality of the milk supply of these various cities. This same work is being conducted during the same months in the year 1908. We consider that if any portion of the dairy inspection should be more severe than another, it should be in the inspection of the city milk supply, because here the milk, without any further treatment, is passed into the homes for consumption. It is possible that a milk of low sanitary quality may lose some of its

objectionable characteristics when being made into butter or cheese, or at any rate when so used, it does not reach such a large portion of our population in great quantities, but milk which is sold at retail in the city milk supply, entering our homes in the form that it does, conveys its unsanitary qualities in marked form. The inspection that we have carried on to date proves very distinctly that all sources of retail milk should be under careful scrutiny. The resources of the Department will not permit this at the present time, but we have been extending it as rapidly and as extensively as the resources of the Department will allow.

An investigation into the cause of an epidemic of supposedly potomaine poisoning in the city of Benton Harbor during the past year, has revealed the great danger in the manufacture of ice cream by the use of condensed milk which is not delivered in sealed packages. The ice cream in question, manufactured in Benton Harbor, was made in part from condensed milk delivered from the city of Chicago, said condensed milk being delivered in open milk cans of the same type used generally in delivering milk to factories. There was no difficulty in tracing the source of the trouble to this condensed milk, and we found on investigating further, that this product was produced solely for the purpose of being used in the manufacture of ice cream, and that the usual precautions taken in the manufacture of condensed milk were not observed in this process. It is worth while to caution the trade against the use of condensed milk which is not delivered in sealed containers and which is not itself thoroughly sterile.

During the past year, the writer has personally made an inspection of a great many stands used for the dispensing of fruits, apples, bananas, oranges, grapes, etc., such stands being largely located on the street or on the sidewalk outside of the stores. A grave danger threatens from this practice, due to the contamination of the products exposed in this manner. We have found it to be the custom, especially among the Italian fruit vendors, to prevent the total loss in the sale of certain partially decayed fruits, such as bananas, by cutting off the ends and cutting out the bad spots in the banana, and then put these all in one pile at one end of the stand and sell them at a greatly reduced price. We have observed that this product, because of its price, appeals to the poorer class of our citizens. We have frequently observed a woman approach these fruit stands and hesitate for a considerable time over which product she shall buy, the more expensive one in which the fruit is sound and firm, or the cheaper one with the ends exposed and the decayed spots removed. Usually she purchases the one mentioned last. The dangers from this practice are very great. In the first place, the utensils used in cutting off the spots and bad places in the fruit are, on the average, unfit for use. In the second place, the lack of personal cleanliness in the vendor himself speaks volumes likewise against the practice. In the third place, fruits thus unprotected are the source for the accumulation of flies, carrying with them possibly the germs of diseases, and at all times accumulations of filth. This product in this unwholesome condition enters the home of the poorer people who are least braced against disease, and usually the percentage of real nourishment or value purchased in these cheaper grades of fruit is far less in proportion to the cost than in the fruit of higher quality, and again, it is the poorer people who thus pay the higher price in the end for the value received.

The practice of cutting up these fruits and the exposure on the streets, unprotected, should be discouraged. At least during the hot summer months, these stands should be protected from flies, etc., by means of mosquito netting or something of a similar nature.

We have also noted a danger in the sale of grapes in which the producer has not been careful to spray them at a time when the copper sulphate used in the spray would be washed off before the grapes were marketed. We have found a great many baskets of grapes on the market in the past year in which close around the stem of the grape was a considerable quantity of the bordeaux mixture dried on, in which condition it would readily be taken into the system with the contents of the grape. Fruit growers should be cautioned in this matter that the product when packed by them for the market, should be in such condition that the spraying mixture would not remain on the fruit. Probably the extended drouth during the past year may be in some way responsible for this condition of affairs, due to the fact that after spraying there was not sufficient rain to wash the fruit free from the spraying mixtures. Fruit of this kind being eaten in large quantities by children, some considerable damage might be done were this not observed by the purchaser.

Much time has been spent during the past two years in experimental work relating to the subject of sausage, which became focused during the present year in the trial on the merits of the case in Armour & Company's application for an injunction before Judge Wiest in the Ingham county circuit court. The Department laboratory went into this matter from any conceivable standpoint. In various parts of the state and in different manufacturing establishments, we conducted actual experiments in the manufacture of different kinds of sausage to ascertain what were the facts from a commercial standpoint regarding its manufacture, and likewise to ascertain to what extent the product was being manipulated by the incorporation of added starch and added water and what the real purposes were in the use of these products. We will not go into this matter further than to say that our experiments during the last two years resulted in the decided conclusion that the use of starch, or cereal as it is called, was not for the purpose of improving the quality of sausage, but on the contrary was purely a commercial consideration, and these conclusions, together with our reasons, were submitted in the case before the court. Had we not been able to devote time to the study of this matter, we would not have been able to present our conclusions to the court. Likewise in the injunction suit with the Pratt Stock Food Company in the year previous, and in the present year with the so-called maple syrup companies. The food industry at the present time has reached such a stage that an adulteration which may be easily discovered today, one month from today could not be reached by those methods of analysis. Consequently it requires continual research and experimental study regarding methods to keep in advance of the activities of the manufacturing interests.

During the year some desirable changes have been made in the laboratory. The room formerly used as an office has been converted into a laboratory. The room formerly used as a stock room has been converted into an office and an additional stock room has been built into the hall.

The operations in the laboratory are more systematically conducted than they have ever been before since we have been connected with it, and the amount of work that is being done is likewise greater than ever before. The working force has remained the same as in the previous year with the addition to the force on June 1, 1908, of Miss Dorothea Moxness, recently from the laboratory of the Baltimore Department of Health. Miss Moxness has been connected with food work for a number of years, formerly under my direction in the experiment station at East Lansing.

Mr. L. H. Van Wormer, the assistant chemist, has again spent most of his time during the year on the regular routine analyses of the ordinary food products. Mr. F. S. Dunks has assisted in this work, together with spending a considerable time in the analyses of different meat products in connection with the sausage investigations of the Department. Mr. W. E. Robison has devoted the major portion of his time to the analyses of the dairy products sent into the Department, as well as the analyses of some of the commercial feeding stuffs.

Some considerable work has been done during the year in advising the heads of some of the state institutions regarding the excellence of the qualities of products they buy under contracts in these various institutions. There is certainly great opportunity and great need for some systematic control of the contract supplies of these various institutions. It has seemed to us that if a scheme could be developed whereby the Department by conferring with the various heads of these state institutions, could agree upon specifications for the different supplies needed, much money could be saved to the state by securing the economical purchasing of these various materials used. It is difficult to portray in a few words the depth of the economy that may be practiced by the inaugurating of such a system as hinted at above, but I feel sure there are few moves that could be made in the state government that would mean so great a curbing of expenses as this one move.

With the laboratory staff I again unite in an expression of hearty appreciation for your support of the various undertakings that have fallen to the laboratory during the past year.

I beg to remain,

Very truly yours,
FLOYD W. ROBISON,
State Analyst.

ANALYSES.

SUMMARY.

| Article. | Total. | Not found adulterated. | Found adulterated. |
|------------------------------------|--------|---------------------------|-----------------------|
| Alcoholic beverages..... | 7 | 1 | 6 |
| Almonds..... | 1 | 1 | 0 |
| Baking powder..... | 7 | 7 | 0 |
| Beans (string)..... | 6 | 2 | 4 |
| Brussels sprouts..... | 2 | 0 | 2 |
| Buckwheat flour..... | 4 | 4 | 0 |
| Butter..... | 39 | 9 | 30 |
| Catsup..... | 6 | 2 | 4 |
| Cheese..... | 8 | 8 | 0 |
| Chicory..... | 1 | 0 | 1 |
| Cocoa..... | 2 | 1 | 1 |
| Coffee..... | 1 | 1 | 0 |
| Confectionery..... | 1 | 1 | 0 |
| Corn (canned)..... | 1 | 0 | 1 |
| Corn syrup..... | 4 | 2 | 2 |
| Cream..... | 40 | 38 | 2 |
| Eggs..... | 1 | 0 | 1 |
| Evaporated cream..... | 1 | 0 | 1 |
| Evaporated milk..... | 2 | 0 | 2 |
| Flavoring preparations..... | 194 | 85 | 109 |
| Flours..... | 3 | 3 | 0 |
| Fruit..... | 6 | 5 | 1 |
| Glucose mixture..... | 4 | 2 | 2 |
| Honey..... | 11 | 10 | 1 |
| Horse radish..... | 2 | 1 | 1 |
| Ice cream..... | 10 | 6 | 4 |
| Jellies, jams, preserves, etc..... | 29 | 18 | 11 |
| Ketchup..... | 6 | 5 | 1 |
| Lard..... | 1 | 0 | 1 |
| Maple sugar..... | 10 | 3 | 7 |
| Maple syrup..... | 34 | 17 | 17 |
| Meat products..... | 32 | 10 | 22 |
| Milk..... | 513 | 400 | 113 |
| Mince meat..... | 2 | 2 | 0 |
| Mixed syrups..... | 9 | 2 | 7 |
| Mixtures..... | 13 | 9 | 4 |
| Molasses..... | 9 | 8 | 1 |
| Mushrooms..... | 1 | 1 | 0 |
| Mustard..... | 23 | 17 | 6 |
| Oils..... | 3 | 3 | 0 |
| Oleomargarine..... | 18 | 7 | 11 |
| Peas (canned)..... | 24 | 7 | 17 |
| Pepper..... | 14 | 10 | 4 |
| Pepper sauce..... | 1 | 1 | 0 |
| Preservatives..... | 2 | 1 | 1 |
| Salt..... | 1 | 0 | 1 |
| Soda fountain drinks..... | 3 | 3 | 0 |
| Spices..... | 13 | 13 | 0 |
| Sugar..... | 1 | 1 | 0 |
| Sweet oil..... | 3 | 2 | 1 |
| Syrup..... | 5 | 3 | 2 |
| Vinegar..... | 15 | 8 | 7 |
| Water..... | 34 | 22 | 12 |
| Whey..... | 1 | 1 | 0 |
| Whiskey..... | 2 | 1 | 1 |
| Wine..... | 2 | 2 | 0 |
| Totals..... | 1,188 | 766 | 422 |

ANALYSES OF SAMPLES.

ALCOHOLIC BEVERAGES.

No. 11887. Unofficial. Sample of Hop Pop. A brewed, spirituous liquor.

No. 12021. Unofficial. Sample of an alcoholic beverage. Sample is a brewed, spirituous liquor.

No. 12487. Unofficial. Sample of Ale (Pop). Sample contains alcohol and is a brewed, spirituous liquor.

No. 12548. Unofficial. Sample of Beer-Nit. Sample is a brewed, fermented liquor of beer type.

No. 12565. Unofficial. Sample of Beverage. Sample is a brewed, fermented liquor of the beer type.

No. 12566. Unofficial. Sample of Beverage. A brewed, fermented liquor of the beer type.

BEANS.

No. 11937, S-73. Sample of Lima Beans (soaked) manufactured by John Boyle Co., Baltimore, Md. The word soaked is printed in too small type. Improperly labeled.

No. 11938, S-74. Sample of Lima Beans manufactured by H. C. Hemingway & Co., Syracuse, N. Y. Not properly labeled as soaked goods.

No. 11943, S-79. Sample of Brownie Brand Lima Beans manufactured by the D. E. Winebrenner Co., Hanover, Pa. Not properly labeled as soaked goods.

No. 12456, I-400. Sample of String Beans handled by Reiss & Brady, New York, N. Y. Contain copper.

BRUSSELS SPROUTS.

No. 11317, S-3. Sample "Choux De Bruxelles" handled by Reid Murdock & Company, Chicago, Ill. Sample contains copper, a substance poisonous and injurious to health.

No. 12457, I-401. Sample of Brussels Sprouts handled by Reid, Murdock & Co., Chicago, Ill., Contain copper.

BUTTER.

No. 11430. Unofficial. Sample of "Butter." Oleomargarine artificially colored.

No. 11449. Unofficial. Sample of "Butter." Oleomargarine artificially colored.

No. 11458, G-198. Sample of "Butter." Dealer, Williams & Marco, Monroe Ave., Detroit. Sample is renovated Butter.

No. 11479, I-309. Sample of "Butter" handled by P. H. Cohen, Detroit. Dealer, James Bellinger, 682 Antoine St., Detroit. Sample is colored oleomargarine.

No. 11593, I-320. Sample of "Butter." Dealer, Paul Sabezynski, 917 Rivard, Detroit. Sample is oleomargarine.

No. 11693, G-199. Sample of "Butter." Dealer, Burt Brown, 424 Michigan Ave., Detroit. Sample is oleomargarine.

No. 11713, G-200. Sample of "Butter." Dealer, W. B. Morgan, 203-209 Cass Ave., Detroit. Sample is oleomargarine.

No. 11719, I-330. Sample of "Butter." Dealer, Hibbard & Holdreith, Detroit. Sample is renovated butter.

No. 11735, I-332. Sample of "Butter." Dealer, James Young, 313 Fort St., Detroit. Sample is oleomargarine.

No. 11756, I-334. Sample of "Butter" handled by A. J. Bloomgarden, 20 E. High St., Detroit. Dealer, Inghcietie Walski, 580 Garfield, Detroit. Sample is oleomargarine.

No. 11780, I-338. Sample of "Butter." Dealer, Roman Galantowitz, 1327 Dubois St., Detroit. Sample is oleomargarine.

No. 11781, I-339. Sample of "Butter." Dealer, Adam Cetner, 1203 Dubois St., Detroit. Sample is oleomargarine.

No. 11895, I-356. Sample of "Butter" from D. J. Wood, Detroit. The product is oleomargarine.

No. 12505. Unofficial. Sample of "Butter." Sample is oleomargarine colored in imitation of yellow butter.

No. 12506. Unofficial. Sample of "Butter." Sample is renovated butter.

No. 12517. Unofficial. Sample of "Butter." Sample is renovated butter.

No. 12518. Unofficial. Sample of "Butter." Sample is oleomargarine colored in imitation of yellow butter.

No. 12519. Unofficial. Sample of "Butter." Sample is oleomargarine colored in imitation of yellow butter.

No. 12521, I-416. Sample of "Butter" from A. L. Hart, Detroit. Sample is oleomargarine colored in imitation of yellow butter.

No. 12531, Z-4. Sample of "Butter" from Jos. E. Romaine, Detroit. Sample is oleomargarine artificially colored.

No. 12532, Z-5. Sample of "Butter" from Marintette & Shapland, Detroit. Sample is renovated butter.

No. 12533, Z-6. Sample of "Butter" from C. F. Smith, Detroit. Sample is renovated butter.

No. 12534, Z-7. Sample of "Butter" from W. H. Greene & Co., Detroit. Sample is oleomargarine.

No. 12538, I-418. Sample of "Butter" from Henry Henser, Detroit. Sample is renovated butter.

No. 12552, Z-8. Sample of "Butter" from H. P. Cohen, Detroit. Sample is oleomargarine artificially colored.

No. 12553, Z-10. Sample of "Butter" from W. C. Ten Eyck, Detroit. Sample is oleomargarine artificially colored.

No. 12554, Z-11. Sample of "Butter" from Bert Brown, Detroit. Sample is oleomargarine artificially colored.

No. 12555, Z-12. Sample of "Butter" from E. Roulo, Detroit. Sample is renovated butter.

No. 12567, Z-18. Sample of "Butter" from C. F. Smith, Detroit. Sample is renovated butter.

No. 12568, Z-19. Sample of "Butter" from C. F. Smith, Detroit. Sample is renovated butter.

CATSUP.

No. 11173. Unofficial. Sample of "Tomato Catsup." Contains starch. Presence of preservative not stated on label.

No. 11877, I-350. Sample of Tomato Catsup manufactured by Frank P. Zimmer, Detroit. Contains starch and is preserved with a benzoate not stated on the label.

No. 11894, I-355. Sample of Tomato Catsup from Frank P. Zimmer, Detroit. Sample contains starch and is preserved with benzoate not stated on the label. No manufacturers' name or address on bottle.

No. 12445, S-137. Sample of Tomato Catsup handled by Symons Bros., Saginaw. Preserved with a benzoate not stated on the label.

CHICORY.

No. 11879, I-352. Sample of Chicory manufactured by Henr. Frank Sohne, Flushing, N. Y. Not properly labeled.

COCOA.

No. 11487, W-223. Sample of Cocoa manufactured by Sterry & Sterry, New York, N. Y. Composed largely of cocoa shells.

CORN.

No. 12305, I-387. Sample of Schuyler Brand Sweet Corn packed by H. C. Hemingway & Co., Auburn, N. Y. Contains saccharine.

CORN SYRUP.

No. 11140, I-251. Sample of "Karo Corn Syrup," manufactured by Corn Products Co., Chicago, Ill., handled by Gustin, Cook & Buckley, Bay City. Not true to formula.

No. 11142, I-253. Sample of "Corn Syrup," manufactured by Warner Manufacturing Co., Waukegan, Ill., handled by Gustin, Cook & Buckley, Bay City. Not true to formula.

CREAM.

No. 11019. Unofficial. Sample of Cream. Below standard in fat.

No. 12378. Unofficial. Sample of Cream. Low in fat.

EGGS.

No. 12019, G-227. Sample of Desiccated Egg manufactured by Northwestern Desiccated Egg Co., Chicago. Sample is unwholesome.

EVAPORATED CREAM.

No. 11365, W-210. Sample of "Evaporated Cream," manufactured by Van Camp Packing Co., Indianapolis, Ind. An evaporated milk not properly labeled.

EVAPORATED MILK.

No. 11327. Sample of "Condensed Milk" manufactured by Cornell Bros., Chicago. Condensed milk decidedly unsafe for human consumption.

No. 11335. Unofficial. Sample of evaporated Milk. Sample is unclean and unsanitary.

FLAVORING PREPARATIONS.

No. 10733, I-204. Sample of "Lemon Terpeneless Flavoring" manufactured by the J. P. Dieter Co., Chicago, Ill. Below standard in citral.

No. 10739, N-415. Sample of "Extract of Lemon" manufactured by the Brisbie Co., Detroit. Below standard.

No. 10827, I-214. Sample of "Lemon Extract" manufactured by Puhl, Webb & Co., Chicago, Ill. Below standard in citral.

No. 10841, I-220. Sample of "Extract of Lemon" manufactured by Etgold Manufacturing Co., Detroit, handled by Edward Henkel & Co., Detroit. Below standard in citral.

No. 10887. Unofficial. Sample of "Lemon Extract." Below standard in citral.

No. 10888. Unofficial. Sample of "Lemon Extract." Below standard.

No. 10890. Unofficial. Sample of "Lemon Extract." Below standard.

No. 10891. Unofficial. Sample of "Lemon Extract." Below standard.

No. 10892. Unofficial. Sample of "Lemon Extract." Below standard.

No. 10916, G-190. Sample of "Vanilla Extract" manufactured by the Mihalovitch-Fletcher Co., Cincinnati, Ohio., Contains foreign color.

No. 10921, I-230. Sample of "Extract of Vanilla" manufactured by Seeley & Co., Detroit. Contains foreign color.

No. 10930, X-203. Sample of "Compound Extract Tonka and Vanilla," manufactured by the E. C. Harley Co., Dayton, Ohio. Contains foreign color.

No. 10934. Unofficial. Sample of "Vanilla Extract." Contains foreign color.

No. 11002. Unofficial. Sample of "Pure Concentrated Extract of Vanilla." Contains foreign color.

No. 11003. Unofficial. Sample of Extract of Vanilla. Contains foreign color.

No. 11006. Unofficial. Sample of "Vanilla" (Bakers Supreme). Contains foreign color and added vanillin.

No. 11080, W-172. Sample of Extract of Lemon (Pennant Brand) manufactured by Ludlow & Robson, Toledo, Ohio. Below standard.

No. 11156. Unofficial. Sample of "Vanilla Flavor" (Normanco). Not properly labeled.

No. 11174, I-257. Samples of Schmidts' Pure Extract Lemon manufactured by T. H. Johnson, Detroit. Below standard.

No. 11175, I-258. Sample of Schmidts' Pure Extract Lemon manufactured by T. H. Johnson, Detroit. Below standard.

No. 11181, I-264. Sample of Acme Concentrated Extract of Lemon manufactured by Acme Extract Co., Jackson. Below standard.

No. 11183, I-266. Sample of Lynch's Pure Double Strength Fruit

Extract Lemon manufactured by Daniel Lynch, Grand Rapids. Below standard.

No. 11213, W-182. Sample of Battle Ax Lemon Extract manufactured by Huron Manufacturing Co., Detroit. Below standard.

No. 11215, W-184. Sample of Lemon Extract (5 cent brand) manufactured by Frisbie Manufacturing Co., Detroit. Below standard.

No. 11216, W-185. Sample of Champion Brand Pure Lemon Extract manufactured by W. J. Gould & Co., Detroit. Below standard.

No. 11217, W-186. Sample of Quaker Extract of Lemon manufactured by the Quaker Extract Co., Chicago, Ill. Below standard.

No. 11244, W-193. Sample of Seal Extract of Lemon manufactured by the Kenwood Preserving Co., Chicago, Ill. Below standard.

No. 11245, W-194. Sample of Anchor Mills Extract of Lemon. Below standard. No manufacturer's name on bottle.

No. 11271, I-271. Sample of Quaker Extract of Lemon manufactured by the Quaker Extract Co., Chicago, Ill. Below standard.

No. 11326, I-278. Sample of Vanilla and Tonka manufactured by Bruce & West Manufacturing Company, Cleveland, Ohio. Not properly labeled as a mixture or compound.

No. 11380, I-245. Sample of Concentrated Lemon Extract manufactured by the Cadillac Extract Co., Detroit. Below standard.

No. 11382, I-280. Sample of Extract of Lemon brand "Trade D Mark" manufactured by the Empire Manufacturing Co., Detroit. Below standard.

No. 11386, I-284. Sample of Black Label Lemon Extract manufactured by H. H. Forkel Co., Detroit. Below standard.

No. 11387, I-285. Sample of the Dr. Culver Pure Concentrated Extract of Lemon manufactured by R. W. Culver Co., Buchanan and South Haven, Mich. Below standard.

No. 11393, U-217. Sample of "Optimo Imitation Flavor Vanilla" manufactured by Sherer-Gillett Company, Chicago, Ill. Not properly labeled.

No. 11436, I-295. Sample of Extract of Lemon manufactured by Asmus Bros., Detroit. Below standard.

No. 11437, I-296. Sample of Vanilla & Tonka, manufactured by H. H. Forkel., Detroit. Contains foreign color.

No. 11438, I-297. Sample of X-L-C-R Lemon Flavor manufactured by Schorndorfer & Eberhard Co., Cleveland, Ohio. Below standard.

No. 11439, I-299. Sample of Banner Extract Lemon manufactured by The Banner Manufacturing Co., Detroit. Below standard.

No. 11440, I-300. Sample of Special Extract of Lemon manufactured by Thomas H. Johnson, Detroit. Below standard.

No. 11442, I-302. Sample of Queen Brand Extract Lemon (Turpened) manufactured by Harris Manufacturing Co., Detroit. Below standard.

No. 11443, I-303. Sample of Pure Extract of Lemon (Turpeneless) manufactured by Horton, Cato Co., Detroit. Below standard.

No. 11459, S-23. Sample of "Vanilla Flavoring Powder" manufactured by Cuitat Company, Chicago, Ill. Not properly labeled as a mixture or compound.

No. 11466, W-215. Sample of "Pure Vanilla Flavoring Extract" manufactured by the Wabash Baking Company and sold by L. L. Swank, Battle Creek. A low grade extract artificially colored with caramel.

No. 11483, W-219. Sample of "Vanilla Flavoring Powder" manufactured by Lily White Manufacturing Co., Detroit. Not properly labeled as a mixture or compound.

No. 11486, W-222. Sample of "Vanilla Compound" manufactured by White Cross Extract Company, Hopkinton, Mass., handled by Mosher Company, Hopkinton, Mass. Not properly labeled.

No. 11506, W-228. Sample of "Vanilla Flavor" manufactured by J. R. Watkins Co., Winona, Minn. Not pure vanilla extract.

No. 11513, W-235. Sample of Peppermint Extract manufactured by Watkins Medical Co., Winona, Minn. Below standard in oil.

No. 11529, S-33. Sample of Vanilla & Tonka manufactured by W. T. Rawleigh Medical Co., Freeport, Ill. Contains some caramel.

No. 11532, S-26. Sample of "Artificial Extract of Strawberry" manufactured by W. T. Rawleigh Medical Company, Freeport, Ill. Not properly labeled as a mixture or compound.

No. 11533, S-37. Sample of "Vanillin & Coumarin" manufactured by W. T. Rawleigh Medical Company, Freeport, Ill. Not properly labeled.

No. 11539, S-43. Sample of "Artificial Banana Flavor" manufactured by W. T. Raleigh Medical Company, Freeport, Ill. Not properly labeled as a mixture or compound.

No. 11558, I-304. Sample of "Optimo Strawberry Flavor (Imitation)" manufactured by Sheren-Gillet Company, Chicago, Ill. Not properly labeled.

No. 11559, I-305. Sample of Lemon Flavor (White Cap) manufactured by the Heekin Spice Co., Cincinnati, Ohio. Below standard.

No. 11560, I-307. Sample of Vanilla & Tonka Extract manufactured by Dewey Manufacturing Co., Detroit. Contains foreign color.

No. 11563, I-311. Sample of Vanilla & Tonka Extract manufactured by Home Extract Co., Boston, Mass. Contains foreign color.

No. 11565, I-313. Sample of Vanilla & Tonka manufactured by Bruce & West Manufacturing Co., Cleveland, Ohio. A mixture or compound not properly labeled.

No. 11566, I-314. Sample of Puritan Extract of Pure Lemon manufactured by Edwin Gillies Co., New York, N. Y. Below standard.

No. 11666. Unofficial. Sample of Vanilla Extract. Artificially colored.

No. 11699, S-57. Sample of "Vanilla & Tonka" manufactured by Bruce & West Manufacturing Company, Cleveland, Ohio. Not properly labeled as a mixture or compound.

No. 11704, I-324. Sample of Compound Extract Vanilla manufactured by Abner Royce & Co., Cleveland, Ohio. Not properly labeled.

No. 11706, I-326. Sample of Red Button Brand Extract of Lemon manufactured by Etgold Manufacturing Co., Detroit. Below standard.

No. 11729. Unofficial. Sample of "Vanilla Extract." Not properly labeled.

No. 11777, I-335. Sample of X-L-C-R Lemon Flavor manufactured by The Schorndorfer & Eberhard Co., Cleveland, Ohio. Below standard.

No. 11778, I-336. Sample of Puritan Extract of Pure Lemon manufactured by Edwin J. Gillies & Co., New York. Below standard.

No. 11779, I-337. Sample of Capital Extract of Lemon manufactured by Frank P. Zimmer, Detroit. Below standard.

No. 11897, I-358. Sample of Flavoring Extract of Lemon manufactured by Dewey Manufacturing Co., Detroit. Below standard.

No. 11901, I-360. Sample of Extract of Vanilla manufactured by the Saginaw Valley Drug Co., Saginaw. Contains artificial color.

No. 11929, S-65. Sample of Vanilla Extract (a compound) manufactured by the Saginaw Valley Drug Co., Saginaw. Contains foreign color.

No. 11931, S-67. Sample of Souder's artificial Flavoring Extract, Pineapple Flavor, manufactured by the Royal Remedy & Extract Co., Dayton, Ohio. Not properly labeled.

No. 11933, S-69. Sample of "Nichols Brand Pure Vanilla" manufactured by the Griggs Bros. & Nichols Co., Toledo, Ohio. Fielbach Co., Toledo, Ohio, jobbers. Contains artificial color.

No. 12001, I-374. Sample of Vanilla Extract manufactured by The Royal Remedy & Extract Co., Dayton, Ohio. Contains artificial color.

No. 12002, I-375. Sample of Extract of Vanilla manufactured by Crusoe Bros., Detroit. Contains artificial color.

No. 12004, I-377. Sample of "Pure Concentrated Extract of Vanilla" manufactured by Dr. Hooper Chemical Co., Detroit & Cleveland. An artificial preparation.

No. 12005, I-378. Sample of Lemon Flavor (Eclipse) manufactured by the Schorndorfer & Eberhard Co., Cleveland, Ohio. Below standard.

No. 12107, I-380. Sample of "Extract Vanilla" (a compound) manufactured for Lee, Cady & Smart, Detroit, and sold by Wm. Allen, Detroit. Contains foreign color.

No. 12205, W-262. Sample of "Jaxon Pure Substitute for Pineapple for Flavoring" manufactured by Foote & Jenks, Jackson. Not properly labeled.

No. 12211, W-268. Sample of "Pure Food Lemon Flavoring Powder" manufactured by Pure Food Flavoring Co., Grand Rapids. Not properly labeled.

No. 12274, S-98. Sample of "Extract Lemon, a compound," manufactured by the Saginaw Valley Drug Co., Saginaw. Not properly labeled.

No. 12275, S-99. Sample of "Extract Vanilla, a compound," manufactured by the Saginaw Valley Drug Co., Saginaw. Contains foreign color and not properly labeled.

No. 12276, S-100. Sample of "Battle Ax Extract Lemon, a compound, manufactured by the Saginaw Valley Drug Co., Saginaw. Improperly labeled.

No. 12292, S-101. Sample of "Souder's Imitation Fruit Flavors, Banana," manufactured by the Royal Remedy & Extract Co., Dayton, Ohio. Not properly labeled.

No. 12293, S-102. Sample of "Souder's Imitation Fruit Flavors, Pineapple," manufactured by the Royal Remedy & Extract Co., Dayton, Ohio. Not properly labeled.

No. 12294, S-103. Sample of "Souder's Imitation Fruit Flavors, Strawberry," manufactured by the Royal Remedy & Extract Co., Dayton, Ohio. Not properly labeled.

No. 12298, S-107. Sample of "Gillett's Double Extract Artificial Banana," manufactured by E. W. Gillett, Co., Chicago, Ill. Not properly labeled.

No. 12299, S-108. Sample of "Gillett's Double Extract Artificial Straw-

berry," manufactured by E. W. Gillett, Chicago, Ill. Not properly labeled.

No. 12347, S-111. Sample of Triumph Brand Compound Extract of Lemon, manufactured by the Dow & Snell Co., Toledo, Ohio. Below standard in oil and citral. Not properly labeled.

No. 12376, N-459. Sample of Lemon Extract manufactured by Daniel Lynch, Grand Rapids. Below standard in citral.

No. 12387, I-390. Sample of Purity Brand Lemon Flavor, manufactured by the Wm. Edwards Co., Cleveland, Ohio. Below standard.

No. 12410. Unofficial. Sample of Purity Concentrated Extract of Vanilla. A low grade extract, artificially colored.

No. 12411. Unofficial. Sample of "Standard Extract of Vanilla." A low grade extract, artificially colored.

No. 12412. Unofficial. Sample of Dr. Fenners Flavor of Lemon. Below standard in oil and citral.

No. 12421, I-397. Sample of Vanilla & Tonka, manufactured by A. B. Judson, Detroit. A mixture or compound. Not properly labeled.

No. 12424, S-123. Sample of Puritan Full Strength Flavoring Extract, Strawberry Flavor, manufactured by the Church & McConnell Co., Toledo, Ohio. A mixture or compound, not properly labeled.

No. 12425, S-124. Sample of Puritan Compound Flavoring Extracts, Raspberry Flavor, manufactured by the Church & McConnell Co., Toledo, Ohio. A mixture or compound, not properly labeled.

No. 12426, S-125. Sample of Puritan Full Strength Flavoring Extracts, Banana, manufactured by the Church & McConnell Co., Toledo, Ohio. A mixture or compound, not properly labeled.

No. 12428, S-127. Sample of Zipp's I X L Vanilla & Coumarin Compound, handled by R. G. Bartley, Toledo, Ohio. Not properly labeled as a mixture or compound.

No. 12438, S-130. Sample of Quaker Brand Flavoring Vanilla, manufactured by The Dieter Co., Chicago, Ill. Not properly labeled.

No. 12439, S-131. Sample of Extract of Vanilla manufactured by L. C. Smith & Co., Cleveland, Ohio. Colored with caramel.

No. 12443, S-135. Sample of "Extract of Banana" manufactured by Seeley Manufacturing Co., Detroit. An artificial preparation.

No. 12444, S-136. Sample of "Compound Essence of Vanilla & Vanillin, manufactured by the Horton Cato Manufacturing Co., Detroit. Not properly labeled.

No. 12482, S-141. Sample of "Extract Vanilla (a compound)," manufactured by the Saginaw Valley Drug Co., Saginaw. Not properly labeled as a mixture or compound.

No. 12494, I-407. Sample of Eclipse Vanilla & Tonka Flavor, manufactured by the Schorndorfer & Eberhard Co., Cleveland, Ohio. Contains foreign color.

No. 12525, S-139. Sample of Quaker Brand Vanillin Flavoring, manufactured by The Dieter Company, Chicago, Ill. A mixture or compound. Not properly labeled.

No. 12516. Unofficial. Sample of Vanilla Extract. Contains foreign color.

No. 12525, S-147. Sample of "Vanillo," manufactured by The Dieter Company, Chicago, Ill. Misbranded.

No. 12526, S-148. Sample of "Extract of Banana" (artificial), manufactured by the Thompson & Taylor Spice Co., Chicago, Ill. An imitation product, improperly labeled.

No. 12527, S-149. Sample of Artificial Extract of Pineapple, manufactured by the Thompson & Taylor Spice Co., Chicago, Ill. An imitation product, misbranded.

No. 12528, S-150. Sample of Artificial Extract of Strawberry, manufactured by the Thompson & Taylor Spice Co., Chicago, Ill. An imitation product, misbranded.

FRUIT.

No. 11180, I-263. Sample of "Stuffed Olives," handled by Gustin Cook & Buckley, Bay City. No manufacturer's name on bottle.

GLUCOSE MIXTURES.

No. 11360, W-205. Sample of Glucose Mixture handled by the Feilbach Co., Toledo, Ohio. Not true to formula.

No. 11463, S-27. Sample of Glucose Mixture handled by the Feilbach Co., Toledo, Ohio. Not true to formula.

HONEY.

No. 11783, I-341. Sample of honey sold by Mrs. Ester Pragg, Detroit. Composed mostly of glucose.

HORSE RADISH.

No. 11712. Unofficial. Sample of Horse Radish. Not pure horse radish.

ICE CREAM.

No. 11208. Unofficial. Sample of "Ice Cream." Below standard in fat.

No. 11209. Unofficial. Sample of "Ice Cream." Below standard in fat.

No. 11210. Unofficial. Sample of "Ice Cream." Contains poisonous ptomains and is very insanitary.

No. 12596. Unofficial. Sample of Ice Cream. Insanitary.

JELLIES, PRESERVES, ETC.

No. 11250. W-199. Sample of "Blackberry Jelly" manufactured by West Shore Packing Co., Chicago, Ill., handled by Franklin MacVeagh & Co., Chicago, Ill. Contains glucose. Not properly labeled.

No. 11251, W-200. Sample of "Currant Jelly" manufactured by West Shore Packing Co., Chicago, Ill., handled by Franklin MacVeagh & Co., Chicago, Ill. Contains glucose. Not properly labeled.

No. 11252, W-201. Sample of "Strawberry Jelly" manufactured by West Shore Packing Co., Chicago, Ill., handled by Franklin MacVeagh & Co., Chicago, Ill. Contains glucose. Not properly labeled.

No. 11253, W-202. Sample of "Raspberry Jelly" manufactured by

West Shore Packing Co., Chicago, Ill., handled by Franklin MacVeagh & Co., Chicago, Ill. Contains glucose. Not properly labeled.

No. 11254, W-203. Sample of "Grape Jelly" manufactured by West Shore Packing Co., Chicago, Ill., handled by Franklin MacVeagh & Co., Chicago, Ill. Not properly labeled. Contains glucose.

No. 11464. Unofficial. Sample of Compound Jelly. Not properly labeled.

No. 11880, N-447. Sample of Raspberry Pie Filling, manufactured by Hills Bros., New York. Imitation goods not properly labeled.

No. 11905, N-450. Sample of Peach Marmalade, manufactured by James L. Everett, Barker Creek, Mich. Not properly labeled.

No. 11930, S-66. Sample of Strawberry Jam, manufactured by Curtice Bros. Co., Rochester, N. Y. Contains glucose. Not properly labeled.

No. 12301, S-110. Sample of Premium Brand Imitation Fruit Jelly, handled by Dow & Snell Co., Toledo, Ohio. Imitation fruit jelly artificially colored.

No. 12354, S-117. Sample of "Crescent Jelly," manufactured by the Corn Products Manufacturing Co., Davenport, Iowa. An imitation fruit jelly not properly labeled.

KETCHUP.

No. 11334, N-429. Sample of "Tomato Ketchup" manufactured by the Ohio Valley Preservative Co., Wheeling, W. Va. Contains a preservative not stated on the label.

LARD.

No. 12266, I-384. Sample of "Lard" manufactured by Friedmans Manufacturing Company, Chicago, Ill. Sample is lard compound.

MAPLE SUGAR.

No. 11668, S-53. Sample of "Blended Maple Sugar" manufactured by the Western Reserve Syrup Co., Cleveland, Ohio, handled by Church & McConnell. Toledo, Ohio. Not a maple sugar.

No. 11671, S-56. Sample of Maple Sugar handled by Church & McConnell, Toledo, Ohio. Not a maple sugar.

No. 11968, S-85. Sample of Western Reserve Blended Maple Sugar manufactured by the Western Reserved Syrup Co., Cleveland, Ohio. Not maple sugar.

No. 12338. Unofficial. Sample of "Maple Sugar." Not pure maple sugar.

No. 12342, N-456. Sample of "Maple Sugar," manufactured by M. B. Brooks, Nashville, Mich. Not a pure maple sugar.

No. 12343, N-457. Sample of "Maple Sugar," manufactured by M. B. Brooks, Nashville. Not a pure maple sugar.

N. 12359, S-122. Sample of "Pure Maple Sugar," manufactured by M. B. Brooks, Nashville, Mich. Not pure-maple sugar.

MAPLE SYRUP.

No. 11381, I-279. Sample of "Old Manse Absolutely Pure Canadian

Sap Maple Syrup" manufactured by Wm. R. Manierre. Not a maple syrup. No manufacturer's address on the bottle.

No. 11549, N-442. Sample of "Western Reserve Ohio Blended Maple Syrup" manufactured by the Western Reserve Syrup Co., Cleveland, Ohio. Jobber, Van Westenbrugge & Erb, Grand Rapids. Not properly labeled.

No. 11545, S-44. Sample of "Scudder's Canada Sap Maple Syrup" manufactured by Scudder Syrup Co., Chicago. Not a pure maple syrup.

No. 11682, N-446. Sample of "Belmont Brand Vermont Maple Syrup" manufactured by Chicago Concentrating Co., Chicago, Ill. Not a maple syrup.

No. 11698, X-210. Sample of "Western Reserve Blended Maple Syrup" manufactured by the Western Reserve Syrup Co., Cleveland, Ohio. Not properly labeled.

No. 11881, N-448. Sample of Blended Syrup, manufactured by the Bay State Maple Syrup Co., Boston, Mass. Not properly labeled.

No. 11961, S-81. Sample of Western Reserve Ohio Blended Maple Syrup manufactured by the Western Reserve Syrup Co., Cleveland, Ohio. Not a blended maple syrup.

No. 11977, S-91. Sample of Western Reserve Blended Syrup, manufactured by the Western Reserve Syrup Co., Cleveland, Ohio. Not blended maple syrup.

No. 12006, I-379. Sample of Scudder's Syrup, manufactured by the Scudder Syrup Co., Chicago, Ill. Not properly labeled.

No. 12201. Unofficial. Sample of Maple Syrup. Fermented syrup.

No. 12339. Unofficial. Sample of Maple Syrup. Not a pure maple syrup.

No. 12341, N-455. Sample of "Pure Maple Syrup," manufactured by M. B. Brooks, Nashville. Not pure maple syrup.

No. 12358, S-121. Sample of "Pure Maple Syrup," manufactured by M. B. Brooks, Nashville, Mich. Not pure maple syrup.

No. 12404, N-460. Sample of "Pure Maple Syrup," manufactured by Maple Tree Products Association, LaBelle, Canada. Not a pure maple syrup.

No. 12442, S-134. Sample of Maple Syrup, manufactured by M. B. Brooks, Nashville, Mich. Not a pure maple syrup.

No. 12455, I-399. Sample of Scudder's Canada Sap Maple Syrup, manufactured by Scudders Syrup Co., Chicago, Ill. Not a pure maple syrup.

No. 12491. Unofficial. Sample of "Maple Syrup." Not a maple syrup.

MEAT PRODUCTS.

No. 11074, L-863. Sample of "Frankfurt Sausage" manufactured by Swift & Company, Chicago, Ill., handled by Saginaw Beef Co., Traverse City, Mich. Not pure sausage. Contains excessive water.

No. 11087, L-865. Sample of "Frankfurt Sausage" manufactured by Vogt Provision Co., Saginaw, E. S. Not pure sausage. Contains excessive water.

No. 11088, L-866. Sample of "Frankfurt Sausage" manufactured by John M. McCormick, Traverse City. Not pure sausage. Contains foreign starch and water.

No. 11106, L-867. Sample of "Frankfurt Sausage" manufactured by Horace R. Fowler, Charlevoix. Not pure sausage. Contains excessive water.

No. 11107, L-868. Sample of "Frankfurt Sausage" manufactured by John A. Trimmer & Company, Charlevoix. Not pure sausage. Contains excessive water.

No. 11108, L-869. Sample of "Frankfurt Sausage" manufactured by Swift & Co., Chicago, Ill., handled by Saginaw Beef Co., Traverse City. Not pure sausage. Contains excessive water.

No. 11112, L-871. Sample of "Frankfurt Sausage" manufactured by Swift & Co., Chicago, Ill., handled by Saginaw Beef Co., Traverse City. Not pure sausage. Contains starch and excessive water.

No. 11113, L-872. Sample of "Bologna Sausage" manufactured by Swift & Company, Chicago. Jobber, Saginaw Beef Co., Traverse City. Not pure sausage. Contains at least 12.24% added water.

No. 11371, N-431. Sample of "Frankfurt Sausage" manufactured by Swift & Company, Chicago, Ill. Jobber, Saginaw Beef Co., Saginaw. Contains excessive water.

No. 11546, S-45. Sample of "Pork Sausage" manufactured by Armour & Company, Chicago, Ill. Contains 2.02% starch and at least 7.30% added water.

No. 11547, S-46. Sample "Frankfurts" manufactured by Swift & Company, Chicago, Ill. Jobber, Colman & Son, Kalamazoo. Contains 2.10% starch and at least 8.55% added water.

No. 11456, L-882. Sample of "Frankfurt Sausage" manufactured by Parker, Webb & Co., Detroit. Contains 1.07% starch and at least 14.78% added water.

No. 11589, L-883. Sample of "Frankfurt Sausage" manufactured by Swift & Company, Chicago, Ill. Jobber, Cornwell Beef Co., Petoskey. Contains 1.07% starch and at least 6.44% added water.

No. 11590, L-884. Sample of "Frankfurt Sausage" manufactured by Swift & Company, Chicago, Ill. Jobber, Cornwell Beef Co., Petoskey. Contains 1.40% starch and at least 9.57% added water.

No. 11591, L-885. Sample of "Frankfurt Sausage" manufactured by Swift & Company, Chicago, Ill. Jobber, Cornwell Beef Co., Petoskey. Contains 1.85% starch and at least 5.34% added water.

No. 11658, W-254. Sample of "Frankfurt Sausage" manufactured by Boyd, Lenham & Company, Chicago. Contains 42% starch and at least 19.86% added water.

No. 11675. Unofficial. Sample of French Pork Sausage. Sample contains added starch.

No. 11573, W-243. Sample of Pork Sausage, manufactured by National Packing Co. Contains foreign starch and water.

No. 11574, W-244. Sample of Frankfurts, manufactured by Bradford & Burns, Grand Rapids, Mich. Contains added water.

No. 11594, L-886. Sample of Frankfurt Sausage, manufactured by Parker, Webb & Co., Detroit. Contains foreign starch and water.

No. 11655, W-251. Sample of Frankfurt Sausage, manufactured by Swift & Co., Chicago, Ill. Contains starch and water.

No. 11702, S-60. Sample of Bologna Sausage, sold by J. R. Lesihman, Cheboygan. Contains foreign color.

MILK.

- No. 10947, Y-75. Sample of "Milk." Below standard in solids and fat.
 No. 10987, T-812. Sample of "Milk." Below standard in fat.
 No. 11009, M-47. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11010, M-48. Sample of "Milk." Below standard in solids, watered.
 No. 11012, E-3. Sample of "Milk." Below standard in solids and fat, skimmed.
 No. 11013, E-4. Sample of "Milk." Below standard in solids and fat, skimmed.
 No. 11020, T-824. Sample of "Milk." Below standard in solids and fat, skimmed.
 No. 11021, T-825. Sample of "Milk." Below standard in solids.
 No. 11027, T-831. Sample of "Milk." Below standards in solids.
 No. 11028, T-832. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11032, T-836. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11050, Y-98. Sample of "Milk." Sample is watered.
 No. 11067, Y-115. Sample of "Milk." Sample watered.
 No. 11068, Y-116. Sample of "Milk." Sample watered.
 No. 11076, Y-119. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11077, M-49. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11085, H-817. Sample of "Milk." Below standard in solids, skimmed.
 No. 11086, H-818. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11093, T-850. Sample of "Milk." Below standard in solids and fat, skimmed.
 No. 11094, Y-120. Sample of "Milk." Below standard in fat.
 No. 11096, H-821. Sample of "Milk." Below standard in fat, skimmed.
 No. 11103, H-827. Sample of "Milk." Below standard in solids and fat, skimmed.
 No. 11105, H-829. Sample of "Milk." Below standard in fat, skimmed.
 No. 11151, H-836. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11152, H-837. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11153, H-838. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11154, H-839. Sample of "Milk." Below standard in solids and fat, watered.
 No. 11155, H-840. Sample of "Milk." Below standard in fat, skimmed.
 No. 11157, H-841. Sample of "Milk." Below standards in solids and fat, skimmed.
 No. 11158, H-842. Sample of "Milk." Below standard in solids and fat, slightly skimmed.

No. 11168. Unofficial. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11169. Unofficial. Sample of Milk." Below standard in solids and fat, skimmed.

No. 11202, T-881. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11203, T-882. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11219, I-268. Sample of "Milk." Below standard in solids and fat and contains an abundance of added water.

No. 11220, I-267. Sample of "Milk." Below standard in solids and fat and contains an abundance of added water.

No. 11235, T-891. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11255, Z-9. Sample of "Milk." Below Standard in solids and fat and contains an abundance of added water.

No. 11280, X-208. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11285, H-914. Sample of "Milk." Skimmed.

No. 11343, Y-174. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11344, Y-175. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11346, Y-224. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11407, H-924. Sample of "Milk." Contains added water.

No. 11415, F-117. Sample of "Milk." Contains added water.

No. 11416, F-118. Sample of "Milk." Contains added water.

No. 11420, H-928. Sample of "Milk." Contains added water.

No. 11421, H-929. Sample of "Milk." Contains added water.

No. 11422, H-934. Sample of "Milk." Contains added water.

No. 11457. Unofficial. Sample of "Milk." Has had some of the fat removed.

No. 11695, H-979. Sample of "Milk." Below standard in solids and fat, watered.

No. 11697, H-983. Sample of "Milk." Below standard in solids, watered.

No. 11732. Unofficial. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11736, F-119. Sample of "Milk." Below standards in solids and fat, watered.

No. 11737, F-120. Sample of "Milk." Below standard in solids, watered.

No. 11738, F-121. Sample of "Milk." Below standard in solids, watered.

No. 11739, F-122. Sample of "Milk." Below standards in solids and fat, watered.

No. 11743, F-126. Sample of "Milk." Below standard in solids, watered.

No. 11751, Y-263. Sample of "Milk." Below standard in solids and fat, watered.

No. 11803, H-1010. Sample of "Milk." Contains added water.

No. 11862, Y-307. Sample of "Milk." Below standard in solids and specific gravity, watered.

No. 11866, Y-311. Sample of "Milk." Sold for skimmed milk but can not be labeled.

No. 11873. Unofficial. Sample of "Milk." Skimmed milk.

No. 11910. Unofficial. Sample of "Milk." Gas producing bacteria present.

No. 11923. Unofficial. Sample of "Milk." Gas producing bacteria present.

No. 11924. Unofficial. Sample of "Milk." Gas producing bacteria present.

No. 11926. Unofficial. Sample of "Milk." Below standard in butterfat.

No. 11945, T-969. Sample of "Milk." Contains added water.

No. 11946, T-970. Sample of "Milk." Contains added water.

No. 11947, T-971. Sample of "Milk." Contains abundance of added water.

No. 11950, T-974. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 11952, T-976. Sample of "Milk." Below standard in solids and fat, watered.

No. 11953, T-977. Sample of "Milk." Contains added water.

No. 11955, T-979. Sample of "Milk." Below standard in solids and fat.

No. 11958, T-982. Sample of "Milk." Contains added water.

No. 11959, T-983. Sample of "Milk." Contains added water.

No. 11969, U-231. Sample of "Milk." Sample has been skimmed.

No. 12059. Unofficial. Sample of "Milk." Filthy milk.

No. 12060. Unofficial. Sample of "Milk." Filthy milk.

No. 12061. Unofficial. Sample of "Milk." Filthy milk.

No. 12101. Unofficial. Sample of "Milk." Skimmed.

No. 12108, I-381. Sample of "Milk." Insanitary.

No. 12109. Unofficial. Sample of "Milk." Below standard in butterfat, skimmed.

No. 12214. Unofficial. Sample of "Milk." Below standard in butterfat.

No. 12226, H-1040. Sample of "Milk." Below standard in solids and specific gravity, watered milk.

No. 12228, H-1050. Sample of "Milk." Below standard in solids and fat.

No. 12229, H-1054. Sample of "Milk." Contains added water.

No. 12230, H-1059. Sample of "Milk." Below standard in solids and fat, skimmed.

No. 12231, H-1060. Sample of "Milk." Below standard in solids and fat.

No. 12255, H-1064. Sample of "Milk." Below standard in solids and specific gravity.

No. 12258, H-1065. Sample of Milk. Below standard in solids and specific gravity.

No. 12259, H-1066. Sample of "Milk." Below standard in solids and fat.

- No. 12260, H-1067. Sample of "Milk." Below standard in solids and fat.
- No. 12361, H-1068. Sample of "Milk." Below standard in solids and fat, watered milk.
- No. 12401, T-1009. Sample of "Milk." Below standard in solids and butterfat, skimmed.
- No. 12403, T-1011. Sample of "Milk." Contains added water.
- No. 12448, F-127. Sample of "Milk." Below standard in solids and fat.
- No. 12469, E-10. Sample of Skim "Milk." Contains added water.
- No. 12471, H-1070. Sample of "Milk." Below standard in solids and fat. Watered.
- No. 12474, H-1073. Sample of "Milk." Below standard in solids and fat.
- No. 12475, H-1074. Sample of "Milk." Below standard in solids and fat.
- No. 12476, H-1075. Sample of "Milk." Below standard in fat, skimmed.
- No. 12477, H-1076. Sample of "Milk." Below standard in solids and fat.
- No. 12478, H-1077. Sample of "Milk." Below standard in solids and fat.
- No. 12486. Unofficial. Sample of "Milk." Insanitary.
- No. 12511. Unofficial. Sample of "Milk." Below standard in fat.
- No. 12513. Unofficial. Sample of "Milk." Below standard in fat.
- No. 12523, F-128. Sample of "Milk." Below standard in solids and fat, watered.
- No. 12524, F-129. Sample of "Milk." Below standard in solids and fat.
- No. 12529, F-130. Sample of "Milk." Below standard in solids and fat, watered.
- No. 12540. Unofficial. Sample of "Milk." Unclean.
- No. 12558, F-131. Sample of "Milk." Below standard in solids and fat, skimmed.
- No. 12569, F-132. Sample of "Milk." Below standard in solids and fat and contains added water.

MIXED SYRUPS.

- No. 11557, M-222. Sample of "Old Moose Export Syrup" handled by Stone, Ordean, Wells Co., Duluth, Minn. Not properly labeled.
- No. 11564, I-312. Sample of "Maple & Rock Candy Syrup" manufactured by Rigney & Company, Brooklyn, N. Y. Not properly labeled.
- No. 11576, U-223. Sample of "Mayflower Breakfast Syrup" manufactured by Welch Bros. Maple Co., Burlington, Vt. Does not contain amount of maple claimed on label.
- No. 11676, U-224. Sample of "Hoffman's Gold Medal Brand Maple Syrup & Sugar Syrup" handled by John Hoffman & Son, Milwaukee, Wis. Little or no maple syrup present.
- No. 11683, I-321. Sample of "Canadian Camp Syrup" manufactured by Wm. S. Anderson, Detroit. Not properly labeled.
- No. 11707, I-327. Sample of "Maple & Rock Candy Syrup" manu-

factured by Rigney & Company, Brooklyn, N. Y. Not true to label.

No. 11734, I-311. Sample of "Cane and Maple Sugar Syrup" manufactured by Bay State Maple Syrup Co., Boston, Mass. Not properly labeled.

MIXTURES.

No. 11138, I-249. Sample of "Purity Maple Butter" manufactured by E. E. Post Co., Utica, N. Y., handled by Ward Andrus, Detroit. Not a pure maple product.

No. 11225, W-191. Sample of "Buckwheat Flour" manufactured by The Greiger-Tinney Co., Indianapolis, Ind. Not pure buckwheat flour.

No. 12206, W-263. Sample of "Maple Cream," manufactured by Boyle & Williams, Bradford, Pa. Not a pure maple product.

MUSTARD.

No. 11137, I-248. Sample of "Prepared Mustard" manufactured by E. A. Charbonneau, Detroit. Contains foreign starch.

No. 11139. Unofficial. Sample of "French Mustard." Not properly labeled.

No. 11172, I-255. Sample of "Prepared Mustard" manufactured by E. A. Charbonneau, Detroit. Contains starch.

No. 11178. Unofficial. Sample of "Bismark Mustard." Not properly labeled.

No. 11428, S-20. Sample of "Shaker Mustard" manufactured by The Harbauer & Marleau Company, Toledo, Ohio. Contains starch, not properly labeled.

No. 11562, I-310. Sample of "Prepared Mustard" manufactured by John Campbell Co., Camden, N. J. Contains starch.

MOLASSES.

No. 12303, I-385. Sample "Palmetto Brand Mollasses & Glucose." Not properly labeled.

OLEOMARGARINE.

No. 11332, S-7. Sample of "Oleomargarine" sold by George Decke, Lansing. No sign displayed or ingredient slip enclosed.

No. 11388, I-286. Sample of "Oleomargarine" sold by C. F. Smith, 571 Michigan Ave., Detroit. No ingredient slip enclosed.

No. 11401, I-290. Sample of "White Oleomargarine" sold by C. F. Smith, 571 Michigan Ave., Detroit. No ingredient slip enclosed.

No. 11674. Unofficial. Sample is "Oleomargarine" colored in imitation of yellow butter.

No. 11708. Unofficial. Sample of "Oleomargarine." Sample is oleomargarine colored in imitation of yellow butter.

No. 11785, I-343. Sample of "Oleomargarine" sold by Albert Sadlowski, Detroit. No ingredient slip enclosed.

No. 11808, I-346. Sample of "Oleomargarine" sold by Anthony Ptach, Detroit. No ingredient slip enclosed.

No. 11970, N-452. Sample of "Oleomargarine," sold by Frank Waltham, Bay City. Not properly labeled.

No. 12496. Unofficial. Sample of "Oleomargarine." Sample is oleomargarine colored in imitation of yellow butter.

No. 12497. Unofficial. Sample of "Oleomargarine." Sample is oleomargarine colored in imitation of yellow butter.

No. 12537, I-417. Sample of "Oleomargarine," sold by John Karpinski. Sample is oleomargarine artificially colored.

PEAS.

No. 10885, I-228. Sample of "Petits Pois" manufactured by Clement & Co., Paris, France. Contains coloring matter injurious to health.

No. 11176, I-259. Sample of "Flageolets (French Beans)" manufactured by George Dalidet, Bordeaux, France. Contains copper.

No. 11314, S-1. Sample of "Petits Pois" handled by Reid, Murdock & Co., Chicago. Contain copper.

No. 11396, S-10. Sample of "Peas" manufactured by Gibbs Preserving Co., Baltimore, Md. Not properly labeled.

No. 11417, S-14. Sample of "Peas" handled by C. Elliott & Co., Detroit. Not properly labeled.

No. 11423, S-16. Sample of "Imported Peas (Pois Fins)" sold by Lewis & Holder, Lansing. Contain copper.

No. 11424, S-17. Sample of "Imported Peas (Petits Pois)" sold by Lewis & Holder, Lansing. Contain copper.

No. 11425, S-18. Sample of "Soaked Peas" handled by Berdan & Co., Toledo, Ohio. Sold by Lewis & Holder, Lansing. Not properly labeled.

No. 11489, W-225. Sample of "French Peas" handled by Lee & Cady, Detroit. Contain copper.

No. 11868, U-229. Sample of "French Peas," handled by Steele, Weedles & Co., Chicago, Ill. Contains preservative injurious to health.

No. 11935, S-71. Sample of "Petits Pois Fins," handled by Church & McConnell, Toledo, Ohio. Colored with copper, therefore injurious to health.

No. 11941, S-77. Sample of "La Panza Early June Peas (Soaked)," manufactured by The Ecks Canning Co., Baltimore, Md. The word soaked printed in too small type, hence improperly labeled.

No. 12257. Unofficial. Sample of "French Peas." Contain copper.

No. 12375, N-458. Sample of "French Peas," handled by Von Buneau MacMonnies & Co., New York. Contain copper.

No. 12574, U-234. Sample of "Petits Pois," handled by James P. Smith, Chicago, Ill. Contain copper.

No. 12589, U-235. Sample of "Fine French Peas," handled by E. M. Lieblien, Hancock, Mich. Contain copper.

No. 12590, U-236. Sample of "Petits Pois," handled by Reiss & Brady, New York, N. Y. Contain copper.

PEPPER.

No. 12352, S-115. Sample of "Shot Pepper," manufactured by Phipps, Penoyer & Company, Saginaw. Contains foreign matter.

No. 12388, I-391. Sample of "Ground Pepper," manufactured by

Schorndorfer & Eberhard Co., Cleveland, Ohio. Does not comply with the standard for black pepper.

No. 12564, I-423. Sample of "Pepper," handled by Schorndorfer & Eberhard Co., Cleveland, Ohio. Does not comply with standard for black pepper.

No. 12576, S-152. Sample of "Pepper," handled by Kidd, Dater & Price Co., Benton Harbor, Mich. Not pure pepper.

PRESERVATIVE.

No. 11678, N-444. Sample of "Konservirungs Salz" handled by Osmus Bros., Detroit. Cannot be used as a preservative.

SALT.

No. 11273. Unofficial. Sample of "Iceine." A sulphate of soda artificially colored.

SWEET OIL.

No. 11701, S-59. Sample of "Sweet Oil," manufactured by Farrand, Williams & Clark, Detroit. Contains cottonseed oil.

SYRUP.

No. 10207, U-200. Sample of "Good Enough Syrup," manufactured by Joannes Bros. Co., Green Bay, Wis. Not true to label.

No. 11204. Unofficial. Sample of "Vanilla Syrup Pure." Not a vanilla syrup.

VINEGAR.

No. 11284, W-204. Sample of "Vinegar" manufactured by Andrew J. Stamp, Plainwell. Below standard in solids and acid.

No. 11690. Unofficial. Sample of "Grape Vinegar." Does not comply with the standard for vinegar.

No. 11843, S-64. Sample of "Vinegar," manufactured by H. J. Heinz Company, Pittsburg, Pa. Below standard in solids and ash.

No. 11871, L-887. Sample of "Vinegar (Rex Amber), manufactured H. J. Heinz Co., Pittsburg, Pa. Deficient in solids.

No. 11906, N-451. Sample of "Cider Vinegar," manufactured by John Parsons, Corunna, Mich. Below standard in acid.

No. 12263, S-97. Sample of "Vinegar," manufactured by John Parsons, Corunna, Mich. Below standard in acid.

No. 12291. Unofficial. Sample of "Cider Vinegar." Below standard in acid.

WATER.

No. 11577. Unofficial. Sample of "Water." Contaminated.

No. 11578. Unofficial. Sample of "Water." Contaminated.

No. 11580. Unofficial. Sample of "Water." Contaminated.

No. 11648. Unofficial. Sample of "Water." Not safe for drinking.

No. 11649. Unofficial. Sample of "Water." Not safe for drinking.

No. 11653. Unofficial. Sample of "Water." Unsafe for drinking.

No. 11916. Unofficial. Sample of "Water." Gas producing bacteria present.

No. 11987. Unofficial. Sample of "Water." Chemically good, bacteriologically suspicious. Should be boiled.

No. 12050. Unofficial. Sample of "Water." Insanitary.

No. 12103. Unofficial. Sample of "Water." Gas producing bacteria present.

No. 12104. Unofficial. Sample of "Water." Gas producing bacteria present.

No. 12105. Unofficial. Sample of "Water." Gas producing bacteria present.

WHISKEY.

No. 11900. Unofficial. Sample of "Whiskey." Below standard in alcoholic strength.

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR THE MONTH OF JULY.

| Number. | Butter fat. % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|------------------|---------------|---------|-----------------|---------------|
| 1 | 85.9 | 16.5 | 35 | 83.2 | 20.3 |
| 2 | 83.1 | 20.3 | 36 | 85.6 | 16.9 |
| 3 | 83.3 | 20 | 37 | 86.7 | 15.3 |
| 4 | 85.1 | 17.6 | 38 | 87 | 15 |
| 5 | 85.9 | 16.4 | 39 | 79.8 | 25.3 |
| 6 | 86.5 | 15.6 | 40 | 84.2 | 18.8 |
| 7 | 83.3 | 20 | 41 | 85.9 | 16.5 |
| 8 | 84.1 | 18.9 | 42 | 84.5 | 17.1 |
| 9 | 80.5 | 24.2 | 43 | 84.6 | 18.2 |
| 10 | 81.5 | 22.7 | 44 | 82.1 | 21.7 |
| 11 | 85.1 | 17.6 | 45 | 83.3 | 20 |
| 12 | 85 | 17.7 | 46 | 84.6 | 18.2 |
| 13 | 84.3 | 18.6 | 47 | 87 | 14.9 |
| 14 | 82.8 | 20.8 | 48 | 85.9 | 16.5 |
| 15 | 83.1 | 20.3 | 49 | Broken. | |
| 16 | 79.1 | 26.4 | 50 | Broken. | |
| 17 | 82.7 | 20.9 | 51 | | 18.1 |
| 18 | 81.7 | 22.4 | 52 | 84.7 | 16.7 |
| 19 | 83.9 | 19.2 | 53 | 80.4 | 24.3 |
| 20 | 82 | 21.9 | 54 | 85.4 | 17.1 |
| 21 | 85.4 | 17.1 | 55 | 88.2 | 13.4 |
| 22 | 80.7 | 23.9 | 56 | 86.5 | 15.6 |
| 23 | 84.1 | 18.9 | 57 | 85.6 | 16.9 |
| 24 | 84.3 | 18.7 | 58 | 85.4 | 17.1 |
| 25 | 86.2 | 16 | 59 | 84.7 | 18.1 |
| 26 | 87.2 | 14.7 | 60 | 82.9 | 20.6 |
| 27 | 80.5 | 24.3 | 61 | 83.7 | 19.5 |
| 28 | 85.6 | 16.9 | 62 | 86.7 | 15.4 |
| 29 | 83.7 | 19.4 | 63 | 87.6 | 14.1 |
| 30 | 82.8 | 20.8 | 64 | 83.1 | 20.3 |
| 31 | 85.2 | 17.3 | 65 | 84.3 | 18.7 |
| 32 | 82.8 | 20.8 | 66 | 86.3 | 15.9 |
| 33 | 86.7 | 15.4 | 67 | 82.1 | 21.8 |
| 34 | 87.5 | 14.3 | | | |

STATE OF MICHIGAN.

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF AUGUST.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|------------|-----------------|---------------|------------|-----------------|---------------|
| 1..... | 86.4 | 15.8 | 38..... | 83.7 | 19.5 |
| 2..... | 84.3 | 18.6 | 39..... | 82.2 | 21.6 |
| 3..... | 83.7 | 19.5 | 40..... | 83.5 | 19.7 |
| 4..... | 85.1 | 17.6 | 41..... | 84.4 | 18.4 |
| 5..... | 86.2 | 16.1 | 42..... | 85 | 17.7 |
| 6..... | 85.6 | 16.9 | 43..... | 84.7 | 18.1 |
| 7..... | 82.9 | 20.6 | 44..... | 82.9 | 20.6 |
| 8..... | 86.4 | 15.8 | 45..... | 85.9 | 16.5 |
| 9..... | 84.5 | 18.3 | 46..... | 88.3 | 13.3 |
| 10..... | 84 | 19 | 47..... | 83.5 | 19.7 |
| 11..... | 85.4 | 17.1 | 48..... | 82.5 | 21.2 |
| 12..... | 84.7 | 18.1 | 49..... | 84.5 | 18.3 |
| 13..... | 83.2 | 20.3 | 50..... | 84.3 | 18.7 |
| 14..... | 87.5 | 14.3 | 51..... | 83.1 | 20.3 |
| 15..... | 82.6 | 21.1 | 52..... | 84.3 | 18.6 |
| 16..... | 80.7 | 23.9 | 53..... | 84.4 | 18.4 |
| 17..... | 83.9 | 19.2 | 54..... | 83.2 | 20.3 |
| 18..... | 84.3 | 18.7 | 55..... | 86.4 | 15.7 |
| 19..... | 83 | 20.5 | 56 Broken. | | |
| 20..... | 82.9 | 20.6 | 57 Broken. | 85.9 | 16.5 |
| 21..... | 85.2 | 17.3 | 58..... | 86.3 | 15.9 |
| 22..... | 85.7 | 16.7 | 59..... | 84.2 | 18.8 |
| 23..... | 83.9 | 19.2 | 60..... | 83.3 | 20 |
| 24..... | 86.5 | 15.6 | 61..... | 83.3 | 20 |
| 25..... | 83.9 | 19.2 | 62..... | 85.4 | 17.1 |
| 26..... | 84.5 | 18.3 | 63..... | 87 | 14.9 |
| 27..... | 83.1 | 20.3 | 64..... | 83.7 | 19.5 |
| 28..... | 78.9 | 26.8 | 65..... | 85.2 | 17.3 |
| 29..... | 85.1 | 17.5 | 66..... | 85.2 | 17.4 |
| 30 Broken. | | | 67..... | 85 | 17.7 |
| 31..... | 84.3 | 18.7 | 68..... | 84.2 | 18.7 |
| 32..... | 86.8 | 15.2 | 69..... | 83.3 | 20 |
| 33..... | 83.3 | 20 | 70..... | 84.4 | 18.4 |
| 34..... | 86.8 | 15.3 | 71..... | 82.8 | 20.8 |
| 35..... | 83.5 | 19.7 | 72..... | 84 | 19 |
| 36..... | 86.7 | 15.4 | 73..... | 85.9 | 16.4 |
| 37..... | 85.9 | 16.4 | 74..... | 84.7 | 18.1 |

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR THE MONTH OF SEPTEMBER.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|---------|-----------------|---------------|
| 1 | 85 | 17.7 | 30 | 85.2 | 17.4 |
| 2 | 84.3 | 18.7 | 31 | 85.6 | 16.9 |
| 3 | 84.8 | 17.8 | 32 | 79.6 | 25.7 |
| 4 | 86.2 | 16 | 33 | 85 | 17.7 |
| 5 | 83.9 | 19.2 | 34 | 86.7 | 15.4 |
| 6 | 83.1 | 20.3 | 35 | 84.4 | 18.4 |
| 7 | 80 | 25 | 36 | 81.7 | 22.4 |
| 8 | 85.2 | 17.4 | 37 | 82.6 | 20.9 |
| 9 | 85.9 | 16.4 | 38 | 85 | 17.7 |
| 10 | 86.4 | 15.8 | 39 | 84.3 | 18.6 |
| 11 | 83.3 | 20 | 40 | 85.4 | 17.1 |
| 12 | 83.5 | 19.7 | 41 | 82.4 | 21.3 |
| 13 | 83.7 | 19.4 | 42 | 82.9 | 20.6 |
| 14 | 85.4 | 17.1 | 43 | 83.7 | 19.4 |
| 15 | 86.4 | 15.7 | 44 | 85.5 | 16.9 |
| 16 | 83.3 | 20 | 45 | 85.1 | 17.6 |
| 17 | 85.9 | 16.4 | 46 | 84.3 | 18.6 |
| 18 | 86.9 | 15.1 | 47 | 86.9 | 15.1 |
| 19 | 82.7 | 20.9 | 48 | 83.3 | 20 |
| 20 | 83.5 | 19.7 | 49 | 86.3 | 15.9 |
| 21 | 86.4 | 15.8 | 50 | 84 | 19 |
| 22 | 83.7 | 19.4 | 51 | 83.7 | 19.4 |
| 23 | 84.6 | 18.2 | 52 | 84.5 | 18.3 |
| 24 | 84.7 | 18.1 | 53 | 84.5 | 18.3 |
| 25 | 82.6 | 21.1 | 54 | 85.1 | 17.6 |
| 26 | 85.4 | 17.1 | 55 | 85.4 | 17.1 |
| 27 | 83.3 | 20 | 56 | 84.4 | 18.4 |
| 28 | 86.2 | 16.1 | 57 | 86.7 | 15.4 |
| 29 | 83.9 | 19.2 | | | |

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR THE MONTH OF OCTOBER.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|-----------------|-----------------|---------------|
| 1 | 83.9 | 19.2 | 27 | 82.6 | 21.1 |
| 2 | 82.6 | 21.1 | 28 | 84.2 | 18.8 |
| 3 | 82.4 | 21.3 | 29 | 83.7 | 19.5 |
| 4 | 85.9 | 16.4 | 30 | 84.6 | 18.2 |
| 5 | 83.7 | 19.4 | 31 | 84.4 | 18.4 |
| 6 | 87.1 | 14.8 | 32 | 83.7 | 19.5 |
| 7 | 83.2 | 20.3 | 33 | 81.1 | 23.3 |
| 8 | 85.6 | 16.9 | 34 | 85.4 | 17.1 |
| 9 | 84.9 | 17.8 | 35 | 85 | 17.7 |
| 10 | 88 | 13.6 | 36 | 85.6 | 16.9 |
| 11 | 84.3 | 18.7 | 37 | 87.4 | 14.5 |
| 12 | 82 | 22 | 38 | 86.2 | 16 |
| 13 | 83 | 20.6 | 39 | 85.2 | 17.4 |
| 14 | 84.5 | 18.3 | 40 | 85.3 | 17.2 |
| 15 | 81.0 | 22.5 | 41 | 84.1 | 18.9 |
| 16 | 83.5 | 19.7 | 42 (No sample). | | |
| 17 | 84.6 | 18.2 | 43 | 82.3 | 21.5 |
| 18 | 87.8 | 13.9 | 44 | 84.9 | 17.8 |
| 19 | 85.3 | 17.3 | 45 | 84.5 | 18.3 |
| 20 | 85.4 | 17.1 | 46 | 83.7 | 19.5 |
| 21 | 83.9 | 19.2 | 47 | 84.3 | 18.6 |
| 22 | 80.9 | 23.6 | 48 | 82.7 | 21 |
| 23 | 84.5 | 18.3 | 49 | 85.2 | 17.4 |
| 24 | 85.9 | 16.5 | 50 | 85.9 | 16.5 |
| 25 | 87.2 | 14.7 | 51 | 85.9 | 16.5 |
| 26 | 84.8 | 18 | 52 | 84.8 | 18 |

STATE OF MICHIGAN.

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF NOVEMBER.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|-----------------|-----------------|---------------|-----------------|-----------------|---------------|
| 1 | 84.2 | 18.8 | 30 | 85.7 | 16.7 |
| 2 | 84.4 | 18.4 | 31 | 86.7 | 15.2 |
| 3 | 84.4 | 18.4 | 32 | 86.5 | 10.5 |
| 4 | 86.3 | 15.9 | 33 | 85.5 | 16.9 |
| 5 | 86.4 | 15.8 | 34 | 85.3 | 17.1 |
| 6 | 83.1 | 20.3 | 35 | 84 | 19 |
| 7 | 84.6 | 18.2 | 36 | 84.7 | 18 |
| 8 | 83.8 | 19.4 | 37 | 84.7 | 18.1 |
| 9 | 86.5 | 15.6 | 38 | 83.3 | 20 |
| 10 | 83.3 | 18.4 | 39 | 87.8 | 13.9 |
| 11 | 83.7 | 19.5 | 40 | 85.2 | 17.4 |
| 12 | 85.9 | 16.5 | 41 | 84.3 | 18.6 |
| 13 | 86.8 | 15.2 | 42 | 84.5 | 18.3 |
| 14 | 81.3 | 23.1 | 43 | 81.5 | 22.5 |
| 15 | 87.3 | 14.3 | 44 | 85 | 17.7 |
| 16 (No sample). | | | 45 | 80.6 | 24 |
| 17 | 86.2 | 16.1 | 46 | 85.1 | 17.4 |
| 18 | 85.7 | 16.7 | 47 | 85.2 | 17.4 |
| 19 | 86.1 | 16.1 | 48 | 84.4 | 18.4 |
| 20 | 82.6 | 21.1 | 49 | 85.5 | 16.9 |
| 21 | 85.9 | 16.4 | 50 | 87.2 | 14.7 |
| 22 | 84.4 | 18.4 | 51 | 88.1 | 13.5 |
| 23 | 85.3 | 17.3 | 52 | 85 | 17.7 |
| 24 | 85.9 | 16.5 | 53 | 84.8 | 19.7 |
| 25 | 86.4 | 15.7 | 54 | 86.7 | 15.4 |
| 26 | 81.3 | 23.1 | 55 | 85.5 | 16.9 |
| 27 | 82.1 | 21.7 | 56 (No sample). | | |
| 28 | 86.7 | 15.4 | 57 | 85.1 | 17.5 |
| 29 | 89.6 | 11.5 | 74 | 83.7 | 19.6 |

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF DECEMBER.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|---------|-----------------|---------------|
| 1 | 85.2 | 17.4 | 25 | 84.3 | 18.6 |
| 2 | 84.5 | 18.3 | 26 | 85.7 | 16.6 |
| 3 | 84.5 | 18.3 | 27 | 82.9 | 20.6 |
| 4 | 82.1 | 21.8 | 28 | 85 | 17.7 |
| 5 | 84.6 | 18.2 | 29 | 83.7 | 19.5 |
| 6 | 82 | 21.9 | 30 | 87 | 15 |
| 7 | 86.6 | 15.5 | 31 | 83.5 | 19.7 |
| 8 | 84.8 | 18 | 32 | 85.4 | 17.1 |
| 9 | 83.5 | 19.7 | 33 | 85.6 | 16.9 |
| 10 | 79.3 | 26.1 | 34 | 83.7 | 19.5 |
| 11 | 84.3 | 18.7 | 35 | 86.7 | 15.4 |
| 12 | 86.4 | 15.8 | 36 | 85.4 | 17.1 |
| 13 | 83.5 | 19.7 | 37 | 84.9 | 17.9 |
| 14 | 88 | 13.7 | 38 | 84.8 | 17.9 |
| 15 | 80.5 | 24.3 | 39 | 83.5 | 19.7 |
| 16 | 89 | 12.3 | 40 | 87.1 | 14.9 |
| 17 | 80.5 | 24.2 | 41 | 83.3 | 20 |
| 18 | 86.2 | 16 | 42 | 84.4 | 18.4 |
| 19 | 84.4 | 18.4 | 43 | 85.7 | 16.7 |
| 20 | 84.5 | 18.3 | 44 | 84.7 | 18.1 |
| 21 | 83.3 | 20 | 45 | 85.7 | 16.7 |
| 22 | 84.4 | 18.4 | 46 | 88.4 | 13.2 |
| 23 | 84.5 | 18.3 | 47 | 83.7 | 19.4 |
| 24 | 86.4 | 15.7 | | | |

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF JANUARY, 1908.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|-------------------|-----------------|---------------|
| 1..... | 85.7 | 16.7 | 32..... | 85.2 | 17.3 |
| 2..... | 85.7 | 16.7 | 33..... | 84.9 | 17.8 |
| 3..... | 87.3 | 14.5 | 34..... | 84.7 | 18.1 |
| 4..... | 85.6 | 16.9 | 35..... | 88.2 | 18.3 |
| 5..... | 83.3 | 20 | 36..... | 85.4 | 17.1 |
| 6..... | 84.3 | 18.6 | 37..... | 87.7 | 14.1 |
| 7..... | 83.1 | 20.3 | 38..... | 85.7 | 16.7 |
| 8..... | 87.2 | 14.7 | 39..... | 83.8 | 19.4 |
| 9..... | 85.1 | 17.6 | 40..... | 85.5 | 16.9 |
| 10..... | 87.8 | 13.9 | 41..... | 84.6 | 18.3 |
| 11..... | 83 | 20.6 | 42..... | 87 | 15 |
| 12..... | 84.7 | 18.1 | 43..... | 87.5 | 14.3 |
| 13..... | 85.6 | 16.9 | 44..... | 85 | 17.7 |
| 14..... | 84.3 | 18.6 | 45..... | 86.7 | 15.4 |
| 15..... | 85.4 | 17.1 | 46 (Sample lost). | | |
| 16..... | 83.5 | 19.7 | 47 (Sample lost). | | |
| 17..... | 88.5 | 13 | 48..... | 83.5 | 19.7 |
| 18..... | 86.4 | 15.8 | 49..... | 87.3 | 14.6 |
| 19..... | 86.2 | 16 | 50..... | 86.3 | 15.9 |
| 20..... | 88.1 | 13.4 | 51..... | 86.3 | 15.9 |
| 21..... | 86.4 | 15.8 | 52..... | 84 | 19.1 |
| 22..... | 82.4 | 21.4 | 53..... | 84.5 | 18.3 |
| 23..... | 84.5 | 18.3 | 54..... | 85.1 | 17.6 |
| 24..... | 83.3 | 20 | 55..... | 87.3 | 14.5 |
| 25..... | 84.1 | 18.9 | 56..... | 88 | 13.6 |
| 26..... | 83.8 | 19.4 | 57..... | 88.6 | 12.9 |
| 27..... | 84.9 | 17.8 | 58..... | 83.7 | 19.4 |
| 28..... | 84.1 | 18.9 | 59..... | 86.7 | 15.4 |
| 29..... | 88.5 | 13 | 60..... | 86.7 | 15.4 |
| 30..... | 88.4 | 13.2 | 61..... | 86.7 | 15.4 |
| 31..... | 85.1 | 17.6 | | | |

STATE OF MICHIGAN.

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF MARCH, 1908.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|---------|-----------------|---------------|
| 1..... | 84.4 | 18.4 | 29..... | 87.7 | 14.1 |
| 2..... | 83.1 | 20.3 | 30..... | 81.8 | 22.2 |
| 3..... | 84.8 | 18 | 31..... | 81.8 | 22.2 |
| 4..... | 86.1 | 16.1 | 32..... | 86.5 | 15.6 |
| 5..... | 89.2 | 12 | 33..... | 83.8 | 19.4 |
| 6..... | 84 | 19.1 | 34..... | 85.1 | 17.4 |
| 7..... | 86.8 | 15.1 | 35..... | 87.8 | 13.9 |
| 8..... | 82.9 | 20.6 | 36..... | 87.2 | 14.7 |
| 9..... | 85 | 17.7 | 37..... | 83.8 | 19.4 |
| 10..... | 87.2 | 14.7 | 38..... | 85.9 | 15.4 |
| 11..... | 87.3 | 14.6 | 39..... | 80 | 20 |
| 12..... | 85.1 | 17.4 | 40..... | 85.3 | 17.2 |
| 13..... | 83.8 | 19.4 | 41..... | 85.3 | 17.2 |
| 14..... | 84 | 19.1 | 42..... | 84.5 | 18.3 |
| 15..... | 84.6 | 18.2 | 43..... | 87.5 | 14.2 |
| 16..... | 88 | 13.7 | 44..... | 84 | 19.1 |
| 17..... | 86.2 | 16 | 45..... | 85.7 | 16.7 |
| 18..... | 87 | 15 | 46..... | 85.5 | 16.9 |
| 19..... | 83.5 | 19.6 | 47..... | 85.7 | 16.6 |
| 20..... | 87.6 | 14 | 48..... | 85.7 | 16.7 |
| 21..... | 82.1 | 21.7 | 49..... | 86.5 | 15.6 |
| 22..... | 84.2 | 18.8 | 50..... | 84.1 | 18.9 |
| 23..... | 83.3 | 20 | 51..... | 84.7 | 18 |
| 24..... | 85.7 | 16.7 | 52..... | 83.7 | 19.3 |
| 25..... | 85.7 | 16.7 | 53..... | 87.1 | 14.7 |
| 26..... | 84.6 | 18.2 | 54..... | 87.5 | 14.2 |
| 27..... | 89.5 | 11.8 | 55..... | 84.8 | 17.9 |
| 28..... | 85.3 | 17.1 | | | |

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF APRIL, 1908.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|---------|-----------------|---------------|
| 1 | 84.3 | 18.6 | 32 | 84.2 | 18.8 |
| 2 | 84.8 | 17.9 | 33 | 84.8 | 17.9 |
| 3 | 84.3 | 18.6 | 34 | 82.2 | 21.5 |
| 4 | 86.1 | 16.2 | 35 | 82.1 | 21.7 |
| 5 | 84.9 | 17.8 | 36 | 87 | 14.8 |
| 6 | 87.1 | 14.9 | 37 | 85.1 | 17.6 |
| 7 | 85.7 | 16.7 | 38 | 85.6 | 16.9 |
| 8 | 84.9 | 17.8 | 39 | 85.9 | 16.4 |
| 9 | 85.2 | 17.4 | 40 | 83.9 | 19.2 |
| 10 | 87 | 14.8 | 41 | 87.4 | 14.5 |
| 11 | 87.8 | 13.9 | 42 | 85.9 | 16.4 |
| 12 | 82.9 | 20.6 | 43 | 86.2 | 16 |
| 13 | 85 | 17.7 | 44 | 83.1 | 20.3 |
| 14 | 86.1 | 16.2 | 45 | 87.3 | 14.4 |
| 15 | 83.3 | 20 | 46 | 84.8 | 18 |
| 16 | 86.1 | 16.2 | 47 | 84.3 | 18.6 |
| 17 | 81.2 | 22.8 | 48 | 84 | 19.1 |
| 18 | 86.8 | 15.2 | 49 | 87.6 | 14 |
| 19 | 88.6 | 12.8 | 50 | 86.4 | 15.6 |
| 20 | 84.5 | 18.3 | 51 | 85.2 | 17.3 |
| 21 | 87 | 14.8 | 52 | 84 | 19.1 |
| 22 | 85.2 | 17.3 | 53 | 81.3 | 23.1 |
| 23 | 82.6 | 20.9 | 54 | 83.3 | 20 |
| 24 | 81.7 | 22.4 | 55 | 88.4 | 13.2 |
| 25 | 86.6 | 15.5 | 56 | 84 | 19.1 |
| 26 | 85.7 | 16.7 | 57 | 84.3 | 18.6 |
| 27 | 87.1 | 14.9 | 58 | 76.3 | 31 |
| 28 | 88 | 13.7 | 59 | 85.5 | 16.9 |
| 29 | 87.1 | 14.7 | 60 | 89.3 | 12 |
| 30 | 85.6 | 16.9 | 61 | 77.4 | 29.2 |
| 31 | 88 | 13.7 | 62 | 86.3 | 15.9 |

ANALYSES OF SAMPLES OF BUTTER FROM THE EDUCATIONAL SCORING TEST FOR
THE MONTH OF MAY, 1908.

| Number. | Butter fat % | Over-run % | Number. | Butter fat % | Over-run % |
|---------|-----------------|---------------|---------|-----------------|---------------|
| 1..... | 85.2 | 17.4 | 31..... | 86.2 | 16 |
| 2..... | 83.3 | 20 | 32..... | 84.1 | 18.9 |
| 3..... | 85.2 | 17.4 | 33..... | 80.4 | 24.3 |
| 4..... | 84.5 | 18.3 | 34..... | 83.7 | 19.4 |
| 5..... | 86.5 | 15.6 | 35..... | 87.2 | 14.7 |
| 6..... | 84.7 | 18.1 | 36..... | 88.4 | 13.2 |
| 7..... | 85 | 17.7 | 37..... | 86.2 | 16 |
| 8..... | 85.2 | 17.3 | 38..... | 83.5 | 19.7 |
| 9..... | 84.3 | 18.7 | 39..... | 84.3 | 18.7 |
| 10..... | 85 | 17.7 | 40..... | 83.3 | 20 |
| 11..... | 85.2 | 17.4 | 41..... | 85 | 17.7 |
| 12..... | 86.4 | 15.8 | 42..... | 85 | 17.7 |
| 13..... | 85.2 | 17.3 | 43..... | 84.2 | 18.8 |
| 14..... | 79.8 | 25.4 | 44..... | 85.7 | 16.7 |
| 15..... | 83.7 | 19.5 | 45..... | 80.4 | 24.3 |
| 16..... | 85.5 | 16.9 | 46..... | 82.6 | 21.1 |
| 17..... | 83 | 20.6 | 47..... | 85.2 | 17.3 |
| 18..... | 85.9 | 16.4 | 48..... | 84.8 | 18 |
| 19..... | 84.7 | 18.1 | 49..... | 83.7 | 19.5 |
| 20..... | 84.5 | 18.3 | 50..... | 84.4 | 18.5 |
| 21..... | 86.4 | 15.8 | 51..... | 83.3 | 20 |
| 22..... | 85.7 | 16.7 | 52..... | 84.6 | 18.2 |
| 23..... | 86.7 | 15.4 | 53..... | 83.2 | 20.3 |
| 24..... | 84.3 | 18.6 | 54..... | 85.6 | 16.9 |
| 25..... | 85 | 17.7 | 55..... | 85.4 | 17.1 |
| 26..... | 85.2 | 17.3 | 56..... | 83.3 | 20 |
| 27..... | 82.4 | 21.3 | 57..... | 85.2 | 17.3 |
| 28..... | 80.5 | 24.3 | 58..... | 82.8 | 20.8 |
| 29..... | 87.6 | 14.1 | 59..... | 86.2 | 16.1 |
| 30..... | 85.9 | 16.5 | 60..... | 83.2 | 20.3 |

PROSECUTIONS.

STATEMENT OF PROSECUTIONS.

FISCAL YEAR ENDING JUNE 30, 1908.

| | |
|--|----|
| Cases pending July 1, 1907 | 10 |
| Cases commenced during fiscal year | 24 |

CASES DISPOSED OF.

| | | |
|----------------------------------|--|----|
| Before examining magistrates: | | |
| Defendants bound over | | 13 |
| Defendants discharged | | 4 |
| In trial courts: | | |
| Defendants convicted | | 23 |
| Defendants acquitted | | 0 |
| Cases pending July 1, 1908 | | 8 |

IN TRIAL COURTS.

| Defendants. | Charge—Unlawful sale of. | County. | Sentence. |
|---------------------------|-----------------------------|---------------------|------------------------|
| Joseph Clock..... | Milk..... | Macomb..... | Fined \$5. |
| Vincent Hackney..... | Milk..... | Genesee..... | Fined \$25. |
| Herman Schultz..... | Milk..... | Wayne..... | Dismissed. |
| Wm. Dailey..... | Milk..... | Wayne..... | Dismissed. |
| A. Hannan..... | Milk..... | Wayne..... | Dismissed. |
| Wm. H. Kemp..... | Milk..... | Oakland..... | Fined \$25. |
| John W. Simms..... | Sausage..... | Grand Traverse..... | |
| John M. McCormick..... | Sausage..... | Grand Traverse..... | |
| Edward E. Ransler..... | Milk..... | Ingham..... | Fined \$12.84 (costs). |
| Geo. Montague..... | Sausage..... | Antrim..... | Suspended. |
| Morris Harris..... | Butter..... | Wayne..... | |
| Ernest Chanters..... | Milk..... | Jackson..... | Fined \$10. |
| Chas. M. Schmitke..... | Maple syrup..... | Ingham..... | Fined \$25. |
| A. J. Clark..... | Maple syrup..... | Ingham..... | Fined \$25. |
| Peter Walters..... | Maple syrup..... | Ingham..... | Fined \$25. |
| Frank F. Reck..... | Maple syrup..... | Ingham..... | Fined \$25. |
| Harvey G. Clippinger..... | Maple syrup..... | Ingham..... | Fined \$25. |
| O. H. Bailey..... | Maple syrup..... | Ingham..... | Fined \$25. |
| John F. Johnson..... | Maple syrup..... | Ingham..... | Fined \$25. |
| Fred Barratt..... | Maple syrup..... | Ingham..... | Fined \$25. |
| Ray LaDue..... | Milk..... | Ingham..... | Fined \$20. |
| Benjamin Shelhorn..... | Milk..... | Washtenaw..... | Fined \$10. |
| Arba F. Hurd..... | Milk..... | Washtenaw..... | Fined \$20. |
| Kirk W. Townner..... | Milk..... | Ingham..... | Fined \$10. |
| Lambert M. Johnson..... | Milk..... | Ingham..... | Fined \$10. |
| *A. L. Hart..... | | Wayne..... | Fined \$50. |

* Appealed.

COURT PROCEEDINGS.

FISCAL YEAR ENDING JUNE 30, 1908.

CASE NO. 393.

PEOPLE VS. JOHN HART.

Charge: Selling oleomargarine artificially colored.

In police court, city of Detroit. Complaint made October 19, 1905. October 19, 1905: Defendant waived examination. Bound over to the recorder's court for the city of Detroit for trial. Case pending.

CASE NO. 397.

PEOPLE VS. JOHN HART.

Charge: Selling oleomargarine artificially colored.

In police court, city of Detroit. Complaint made October 19, 1905. October 21, 1905: Defendant waived examination. Bound over to the recorder's court for the city of Detroit for trial. Case pending.

CASE NO 419.

PEOPLE VS. ROBERT E. ELLSWORTH.

Charge: Selling crushed fruit containing formaldehyde.

In justice court, city of Alpena. Complaint made July 2, 1906. Case pending.

CASE NO 471.

PEOPLE VS. HERMAN SCHULTZ.

Charge: Selling adulterated milk.

In justice court, city of Detroit. Complaint made May 16, 1907. July 29, 1907. Case dismissed.

CASE NO. 472.

PEOPLE VS. WM. DAILEY.

Charge: Selling adulterated milk.

In justice court, city of Detroit. Complaint made May 16, 1907. July 29, 1907. Case dismissed.

CASE NO. 473.

PEOPLE VS. A. HANNEN.

Charge: Selling adulterated milk.

In justice court, city of Detroit. Complaint made May 16, 1907. July 29, 1907. Case dismissed.

CASE NO. 477.

PEOPLE VS. VINCENT HACKNEY.

Charge: Selling adulterated milk.
In justice court, city of Flint. Complaint made June 13, 1907. Defendant entered a plea of guilty. Fined \$25.

CASE NO. 478.

PEOPLE VS. OSCAR M. ELLIOTT.

Charge: Unlawful manufacture of oleomargarine.
In justice court, city of Lansing. Complaint made June 21, 1907. Case dismissed.

CASE NO. 493.

PEOPLE VS. JOSEPH CLOCK.

Charge: Selling adulterated milk.
In justice court in and for the city of Stanton. Complaint made December 20, 1906. September 4, 1907: Defendant entered a plea of guilty. Fined \$5.00 and costs.

CASE NO. 494.

PEOPLE VS. WM. H. KEMP.

Charge: Selling adulterated milk.
In justice court, city of Pontiac. Complaint made August 15, 1907. October 19, 1907: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 495.

PEOPLE VS. JOHN W. SIMMS.

Charge: Selling adulterated sausage.
In recorder's court, city of Traverse City. Complaint made August 15, 1907. September 23, 1907: Defendant entered a plea of guilty.

CASE NO. 496.

PEOPLE VS. JOHN M. M'COBICK.

Charge: Selling adulterated sausage.
In recorder's court, city of Traverse City. Complaint made August 15, 1907. September 23, 1907: Defendant entered a plea of guilty.

CASE NO. 497.

PEOPLE VS. EDWARD E. RANSIER.

Charge: Selling adulterated milk.
In justice court, city of Lansing. Complaint made September 4, 1907. September 9, 1907: Defendant convicted. Fined \$12.84 costs.

STATE OF MICHIGAN.

CASE NO. 498.

PEOPLE VS. GEO. MONTAGUE.

Charge: Selling adulterated sausage.

In justice court, city of Bellaire. Complaint made September 17, 1907. October 28, 1907: Defendant entered a plea of guilty.

CASE NO. 499.

PEOPLE VS. HENRY J. BRESSON.

Charge: Selling adulterated sausage.

In recorder's court, city of Kalamazoo. Complaint made November 20, 1907. December 28, 1907: Examination held. Case pending.

CASE NO. 500.

PEOPLE VS. HENRY VREDEVOOGD.

Charge: Selling adulterated sausage.

In recorder's court, city of Kalamazoo. Complaint made November 20, 1907. December 28, 1907: Examination held. Case pending.

CASE NO. 501.

PEOPLE VS. HENRY J. PHILLIPP.

Charge: Selling adulterated sausage.

In recorder's court, city of Kalamazoo. Complaint made November 20, 1907. December 28, 1907: Examination held. Case pending.

CASE NO. 502.

PEOPLE VS. MORRIS HARRIS.

Charge: Selling adulterated butter.

In police court, city of Detroit. Complaint made November 26, 1907. January 17, 1908: Bound over to the recorder's court for the city of Detroit for trial. April 15, 1908: Defendant convicted.

CASE NO. 503.

PEOPLE VS. ERNEST CHANTERS.

Charge: Selling adulterated milk.

In justice court, city of Jackson. Complaint made January 14, 1908. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 504.

PEOPLE VS. CHAS. M. SCHMITKE.

Charge: Selling adulterated maple syrup.

In justice court, city of Lansing. Complaint made February 4, 1908. February 17, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant tried and convicted. Fined \$25.

CASE NO. 505.

PEOPLE VS. A. J. CLARK.

Charge: Selling adulterated maple syrup.
In justice court, city of Lansing. Complaint made February 4, 1908. May 4, 1908: Defendant bound over to the circuit court, county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 506.

PEOPLE VS. PETER WALTERS.

Charge: Selling adulterated maple syrup.
In justice court, city of Lansing. Complaint made February 4, 1908. May 4, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 507.

PEOPLE VS. FRANK F. BECK.

Charge: Selling adulterated maple syrup.
In justice court, city of Lansing. February 4, 1908: Complaint made. May 4, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 508.

PEOPLE VS. HARVEY G. CLIPPINGER.

Charge: Selling adulterated maple syrup.
In justice court, city of Lansing. February 4, 1908: Complaint made. May 4, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 509.

PEOPLE VS. O. H. BAILEY.

Charge: Selling adulterated maple syrup.
In justice court, city of Lansing. February 4, 1908: Complaint made. May 4, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 510.

PEOPLE VS. JOHN F. JOHNSON.

Charge: Selling adulterated maple syrup.
In justice court, city of Lansing. February 4, 1908: Complaint made. May 4, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

STATE OF MICHIGAN.

CASE NO. 511.

PEOPLE VS. FRED BARRATT.

Charge: Selling adulterated maple syrup.

In justice court, city of Lansing. February 4, 1908: Complaint made. May 4, 1908: Defendant bound over to the circuit court for the county of Ingham for trial. May 18, 1908: Defendant entered a plea of guilty. Fined \$25.

CASE NO. 512.

PEOPLE VS. RAY LA DUE.

Charge: Selling adulterated milk.

In justice court, city of Lansing. February 10, 1908: Complaint made. Defendant entered a plea of guilty. Fined \$20 and costs.

CASE NO. 513.

PEOPLE VS. BENJAMIN SHELHORN.

Charge: Selling adulterated milk.

In justice court, city of Lansing. February 12, 1908: Complaint made. Defendant entered a plea of guilty. Fined \$10.

CASE NO. 514.

PEOPLE VS. ARBA F. HURD.

Charge: Selling adulterated milk.

In justice court, city of Ann Arbor. February 12, 1908: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 515.

PEOPLE VS. KIRK W. TOWNER.

Charge: Selling adulterated milk.

In justice court, city of Lansing. February 29, 1908: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 516.

PEOPLE VS. LAMBERT M. JOHNSON.

Charge: Selling adulterated milk.

In justice court, city of Lansing. February 29, 1908: Complaint made. Defendant entered a plea of guilty. Fined \$10 and costs.

CASE NO. 517.

PEOPLE VS. A. L. HART.

Charge: Obstructing an inspector in the performance of her duties.

In police court, city of Detroit. June 9, 1908: Complaint made. June 23, 1908: Defendant convicted. Fined \$50. Case appealed.

FINANCIAL STATEMENT.

FINANCIAL STATEMENT.

From July 1, 1907, to June 30, 1908.

| | |
|--|-------------|
| Funds available July 1, 1907..... | \$35,000 00 |
| Fees collected for registration of creameries, cheese factories, etc.... | 3,090 00 |
| License fees collected for concentrated commercial feeding stuffs..... | 3,020 00 |
| Fees collected for milk dealers' licenses..... | 2,087 00 |
| Test tubes sold | 31 15 |
| | \$43,228 15 |

DISBURSEMENTS.

| | |
|---|-------------|
| A. C. Bird, Commissioner, salary..... | \$2,000 00 |
| Colon C. Lillie, Deputy Commissioner, salary..... | 1,082 90 |
| Floyd W. Robison, State Analyst, salary..... | 2,000 00 |
| L. H. Van Wormer, Assistant Chemist, salary..... | 1,200 00 |
| M. J. Smith, Chief Clerk, salary..... | 1,000 00 |
| Ida M. Harris, Clerk, salary..... | 1,000 00 |
| Henry Kiekintveld, Clerk, salary..... | 1,000 00 |
| Osmond C. Howe, Clerk, salary..... | 1,000 00 |
| Fred S. Dunks, Clerk, salary..... | 1,000 00 |
| W. E. Robison, Clerk, salary..... | 1,000 00 |
| B. L. Rosecrans, Clerk, salary..... | 250 00 |
| L. B. Edinborough, Clerk, salary..... | 166 25 |
| E. H. Parker, Clerk, salary | 180 00 |
| Gilman M. Dame, Regular Inspector, salary..... | 1,000 00 |
| E. C. Schultz, Regular Inspector, salary..... | 1,000 00 |
| James E. Jacklin, Regular Inspector, salary..... | 1,000 00 |
| Joseph Schnitzer, Regular Inspector, salary..... | 725 22 |
| Helmer Rabild, Regular Inspector, salary..... | 848 88 |
| Chas. H. Dear, Regular Inspector, salary..... | 839 10 |
| E. A. Haven, Regular Inspector, salary..... | 920 40 |
| C. J. Bird, Regular Inspector, salary..... | 832 40 |
| F. O. Foster, Regular Inspector, salary..... | 38 46 |
| John Munn, Special Inspector, salary..... | 942 00 |
| N. P. Hull, Special Inspector, salary..... | 717 00 |
| E. N. Gardner, Special Inspector, salary..... | 902 46 |
| H. Horton, Special Inspector, salary..... | 843 00 |
| J. B. Barron, Special Inspector, salary..... | 798 00 |
| E. W. Sutton, Special Inspector, salary..... | 441 00 |
| E. S. Powers, Special Inspector, salary..... | 948 40 |
| J. H. Credicott, Special Inspector, salary..... | 162 00 |
| R. G. Brumm, Special Inspector, salary..... | 318 00 |
| Fred T. Sackrider, Special Inspector, salary..... | 114 25 |
| Lillah Haggerty, Special Inspector, salary..... | 89 52 |
| Margaret Merrill, Special Inspector, salary..... | 75 00 |
| F. B. Wilson, Special Inspector, salary..... | 100 00 |
| N. J. Bullock, Special Inspector, salary..... | 6 00 |
| M. Jensen, Special Inspector, salary..... | 21 00 |
| Postage | 1,448 27 |
| Chemicals, laboratory supplies, etc..... | 936 29 |
| General expense (see statement following)..... | 14,282 35 |
| | \$43,228 15 |
| | \$43,228 15 |

GENERAL EXPENSE INCLUDES.

| | |
|---|-------------|
| A. C. Bird, Commissioner, expenses..... | \$848 31 |
| Colon C. Lillie, Deputy Commissioner, expenses..... | 605 99 |
| Floyd W. Robison, State Analyst, expenses..... | 420 79 |
| L. H. Van Wormer, Assistant Chemist, expenses..... | 53 30 |
| Osmond C. Howe, Clerk, expenses..... | 577 94 |
| Fred S. Dunks, Clerk, expenses..... | 29 68 |
| W. E. Robison, Clerk, expenses..... | 56 69 |
| Gilman M. Dame, Regular Inspector, expenses..... | 958 18 |
| E. C. Schultz, Regular Inspector, expenses..... | 271 94 |
| James E. Jacklin, Regular Inspector, expenses..... | 646 53 |
| Joseph Schnitzer, Regular Inspector, expenses..... | 522 46 |
| Helmer Rabild, Regular Inspector, expenses..... | 712 47 |
| Chas. H. Dear, Regular Inspector, expenses..... | 708 36 |
| E. A. Haven, Regular Inspector, expenses..... | 893 55 |
| C. J. Bird, Regular Inspector, expenses..... | 597 89 |
| F. O. Foster, Regular Inspector, expenses..... | 41 13 |
| John Munn, Special Inspector, expenses..... | 649 51 |
| N. P. Hull, Special Inspector, expenses..... | 708 96 |
| E. N. Gardner, Special Inspector, expenses..... | 879 36 |
| H. Horton, Special Inspector, expenses..... | 738 06 |
| E. W. Sutton, Special Inspector, expenses..... | 159 48 |
| J. B. Barron, Special Inspector, expenses..... | 560 10 |
| E. S. Powers, Special Inspector, expenses..... | 803 17 |
| Fred T. Sackrider, Special Inspector, expenses..... | 113 84 |
| F. B. Wilson, Special Inspector, expenses..... | 20 66 |
| N. J. Bullock, Special Inspector, expenses..... | 4 84 |
| M. Jensen, Special Inspector, expenses..... | 69 57 |
| R. G. Brumm, Special Inspector, expenses..... | 300 29 |
| Express | 779 05 |
| Telegraph and telephone | 250 05 |
| Freight and cartage | 12 48 |
| Incidentals | 287 72 |
| | <hr/> |
| | \$14,282 35 |

CREAMERIES AND CHEESE FACTORIES.

REGISTERED CREAMERIES, CHEESE FACTORIES, SKIMMING STATIONS, RECEIVING STATIONS, CONDENSED MILK FACTORIES AND MILK DEPOTS.

FOR THE REGISTRATION YEAR BEGINNING APRIL 1, 1908.

ALCONA COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|-------------------------|-------------------|--------------|
| Alcona County Creamery, | H. S. Johnson, | Harrisville. |

ALLEGAN COUNTY.

| | | |
|--------------------------------------|--------------------------|------------------|
| Wayland Creamery Co., | E. W. Pickett, | Wayland. |
| Gobleville Creamery Co. Station, | Geo. W. Lyle, | Gobleville. |
| Hilliards Creamery Co., | H. E. Parmelee, Sec'y, | Hilliards. |
| Overisel Creamery Co., | John Peters, | Holland, No. 9. |
| Oakland Creamery Co., | Ralph E. Bredeweg, | Hamilton, No. 1. |
| Dorr Creamery Co., | E. S. Botsford, | Dorr. |
| Otsego Creamery Co., | C. I. Curry, | Otsego. |
| Kellogg Creamery Co., | F. C. McClelland, | Allegan, No. 7. |
| East Saugatuck Creamery, | C. J. Lokker & Co., | Holland. |
| Hamilton Skimming Station, | C. J. Lokker & Co., | Holland. |
| Salem Butter & Cheese Co., | Silas Loew, | Burnips Corners. |
| Benthelm Creamery Co., | Gomert Kruithof, | Hamilton, No. 3. |
| Chicora Skimming Station, | Chas. Linton, | Bloomingsdale. |
| Fillmore Center Creamery, | Henry J. Kleinheksel, | Holland, No. 5. |
| Hopkins Creamery Co., | H. H. Stroud, | Hopkins. |
| Monterey Skimming Station, | Hopkins Creamery Co., | Hopkins. |
| Miner Lake Skimming Station, | Hopkins Creamery Co., | Hopkins. |
| Bradley Skimming Station, | Rudell Creamery, | Grand Rapids. |
| Pearle Creamery Co., | Andrew Johnson, | Pearle. |
| Riverside Cheese Factory, | Ida A. Buskirk, | Hopkins. |
| Allegan Creamery & Cold Storage, | Chas. Kemmer, | Allegan. |
| Plainwell Creamery & Cheese Factory, | Hastings Industrial Co., | Chicago, Ill. |
| Moline Skimming Station, | Sanitary Milk Co., | Grand Rapids. |
| Springdale Cheese Factory, | M. W. Hicks, | Hopkins, No. 1. |
| Daisy Creamery, | H. H. Tien, | Graapschap. |

ALPENA COUNTY.

| | | |
|------------------|--------------------------|---------|
| Alpena Creamery, | Alpena Farm Produce Co., | Alpena. |
|------------------|--------------------------|---------|

ANTRIM COUNTY.

| | | |
|-------------------------------|------------------|-----------|
| Kewadin Creamery Association, | John E. Winters, | Kewadin. |
| Mancelona Creamery, | E. S. Martin, | Petoskey. |

ARENAC COUNTY.

| | | |
|---------------------------------------|---------------|-----------|
| Arenac Creamery, | I. A. Shaver, | Omer. |
| Sterling Co-operative Creamery Ass'n, | James Adams, | Sterling. |
| Standish Creamery, | T. R. Burr, | Standish. |
| Standish Cheese Factory, | John Myers, | Standish. |

BARRY COUNTY.

| | | |
|----------------------------|----------------------|------------------|
| Hastings Crystal Creamery, | J. A. Rockwood, | Hastings. |
| Woodland Creamery Co., | B. S. Holly, | Woodland. |
| Freeport Creamery Co., | Ezra Leonard, Sec'y, | Freeport. |
| Hickory Creamery Co., | P. N. Lawrence, | Hickory Corners. |
| Nashville Creamery Co., | A. C. Siebert, | Nashville. |
| Cold Springs Creamery Co., | H. E. Hendrick, | Middleville. |
| Dowling Creamery, | F. E. Allen, | Dowling. |

STATE OF MICHIGAN.

BAY COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|-----------------------------|-------------------|-----------------------------|
| Frankenlust Cheese Factory, | John Berger, | Bay City, Station A, No. 5. |
| Bay City Creamery Co., | T. E. Webster, | Bay City. |
| Monitor Cheese Factory, | LeRoy Reynolds, | Bay City. |
| Amelith Cheese Co., | Geo. A. Nuffer, | Bay City, No. 5. |
| Valley Creamery, | Chas. Voss, | Bay City. |
| Pinconning Creamery Co., | C. S. Sass, | Pinconning. |
| Frankenlust Creamery, | J. C. Neumeyer, | Bay City, Station A, No. 5. |
| Willard Creamery, | G. R. Snyder, | Auburn, No. 1. |

BERRIEN COUNTY.

| | | |
|--------------------------------------|-----------------------|-------------------------|
| Gallen Creamery Co., | E. A. Blakeslee, | Gallen. |
| Millburg Creamery Ass'n, | Chas. S. Reynolds, | Benton Harbor, No. 3. |
| Twin City Creamery Co. (depot), | W. T. Parks, | Benton Harbor. |
| Watervliet Creamery Co., | W. M. Baldwin, Sec'y, | Watervliet. |
| Oronoko Creamery Co., | P. F. Schriver, | Buchanan. |
| Thorburn Bros. Milk Depot, | Thorburn Bros., | Benton Harbor. |
| Bishop Creamery Co., | Jack Bishop, | Buchanan. |
| Buchanan Creamery Co., | H. B. Howe, | Buchanan. |
| Coloma Creamery Ass'n, | Geo. W. Grant, | Coloma. |
| Pipestone Jersey Creamery, | Geo. T. Yetter, | Eau Claire, No. 2. |
| J. T. Clark Milk Depot, | J. T. Clark, | St. Joseph. |
| Niles Creamery Co., | C. R. Smith, | Niles. |
| Three Oaks Creamery & Skimming Sta., | John Jacobson, | Chicago, Ill. |
| Berrien Center Elgin Creamery Co., | A. S. Ricketts, | Berrien Center. |
| E. E. Rouse Milk Depot, | E. E. Rouse, | Benton Harbor. |
| Dayton Creamery, | Dayton Creamery Co., | Dayton. |
| Hinchman Creamery, | M. S. Bedinger, | Berrien Springs, No. 2. |

BRANCH COUNTY.

| | | |
|------------------------------------|-------------------------|---------------|
| Bronson Co-operative Creamery Co., | A. J. Ashbreck, | Bronson. |
| Union City Creamery Co., | J. E. Spore, | Union City. |
| Batavia Creamery Co., Ltd., | P. B. Wessel, Sec'y, | Batavia. |
| Sherwood Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Bronson Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Coldwater Creamery Co., | Coldwater Creamery Co., | Coldwater. |
| Quincy Creamery, | J. F. Power, | Quincy. |

CALHOUN COUNTY.

| | | |
|-----------------------------------|------------------------|----------------------|
| Albion Creamery, | E. DeMuth, | Albion. |
| W. H. Brown Milk Depot, | W. H. Brown, | Battle Creek. |
| Homer Creamery, | Litchfield Butter Co., | Litchfield. |
| Marshall Creamery Co., | E. E. Simmons, | Marshall. |
| Battle Creek Milk Depot, | Milk Producers Co., | Battle Creek. |
| Battle Creek Sanitarium Creamery, | J. H. Kellogg, M. D., | Battle Creek. |
| Tekonsha Co-operative Cheese Co., | H. E. Taylor, | Tekonsha. |
| Battle Creek Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Tekonsha Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Johnson Milk Co., | Chas. A. Johnson, | Battle Creek. |
| Joppa Creamery Co., | E. D. Bushnell, | East Leroy, R. F. D. |
| Nottawa Valley Creamery Co., | R. P. Wisner, | Athens. |

CASS COUNTY.

| | | |
|---------------------------------|--------------------------|--------------|
| Edwardsburg Creamery Co., | Wm. A. Runkle, | Edwardsburg. |
| Vandalla Creamery Co., | Geo. Jones, | Penn. |
| Cassopolis Creamery Co., | Cassopolis Creamery Co., | Cassopolis. |
| Dowagiac Creamery & Butter Co., | G. W. Schopbach, | Dowagiac. |
| Jones Creamery Co., | R. L. Schell, | Jones. |
| Marcellus Creamery, | L. Whitehead, Secretary, | Marcellus. |

CHARLEVOIX COUNTY.

| | | |
|--------------------|----------------|-------------|
| X. L. Produce Co., | E. W. Coulter, | Charlevoix. |
|--------------------|----------------|-------------|

CHEBOYGAN COUNTY.

| | | |
|--------------------------|--------------|-------------|
| Riggsville Creamery Co., | H. T. Myers, | Riggsville. |
|--------------------------|--------------|-------------|

CHIPPEWA COUNTY.

| | | |
|-----------------------------|----------------------|-------------------|
| Superior Cheese Co., | Superior Cheese Co., | Brimley. |
| W. H. Stribling Milk Depot, | W. H. Stribling, | Sault Ste. Marie. |

CLARE COUNTY.

| | | |
|--------------------------------------|---------------|----------|
| Farwell Cheese Factory and Creamery, | R. J. Powell, | Farwell. |
|--------------------------------------|---------------|----------|

CLINTON COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|-------------------------------|-----------------------------|---------------|
| Fowler Creamery Co., | Fred L. Pasch. | Fowler. |
| Riley Skimming Station, | Fowler Creamery Co., | Fowler. |
| Eureka Cheese Factory, | Bristol & Jefferys, | Eureka. |
| Michigan Creamery, | The Clinton Butter Co., | St. Johns. |
| Eagle Cheese Factory, | James H. Fish, | Eagle. |
| Westphalia Creamery, | Anthony P. Arens, | Westphalia. |
| Maple Rapids Cheese Factory, | Burk & Reist, | Maple Rapids. |
| Ovid Cheese Factory, | Mich. M'k & F'd Pr'cts Co., | Elsie. |
| Shepardsville Cheese Factory, | Mich. M'k & F'd Pr'cts Co., | Elsie. |
| Elsie Cheese Factory, | Mich. M'k & F'd Pr'cts Co., | Elsie. |

CRAWFORD COUNTY.

| | | |
|--------------------|----------------------|-----------|
| Grayling Creamery, | Mrs. Matilda Nelson, | Grayling. |
|--------------------|----------------------|-----------|

DELTA COUNTY.

| | | |
|--------------------------|----------------------|-----------|
| Escanaba Creamery, | Martin Henricksen, | Escanaba. |
| Escanaba Milk Depot, | H. Phillips, | Escanaba. |
| Schaffer Cheese Factory, | Chas. Elliott & Son, | Schaffer. |

DICKINSON COUNTY.

| | | |
|----------------------|----------------------|----------------|
| Norway Creamery, | Norway Creamery Co., | Norway. |
| Best Bros. Creamery, | Best Bros., | Iron Mountain. |

EATON COUNTY.

| | | |
|--------------------------------|------------------------|----------------|
| A. M. Smith & Co. Creamery, | C. W. Smith, | Eaton Rapids. |
| Vermontville Creamery, | H. W. Weber, | Vermontville. |
| Charlotte Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Potterville Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Mulliken Creamery, | James Mead, | Grand Ledge. |
| Olivet Creamery, | D. H. Brown, | Olivet. |
| Charlotte Creamery, | W. T. Leonard & Co., | Norwood, N. Y. |

GENESEE COUNTY.

| | | |
|-------------------------------------|----------------------|--------------|
| Gibsonville Altruist Community, | S. S. Gibson, | Grand Blanc. |
| Goodrich Dairy Ass'n, | S. E. Pierson, | Goodrich. |
| Thetford Cheese Co., | L. J. Benjamin, | Clio, No. 1. |
| Vienna Cheese Factory Ass'n, | John Anderson, | Clio. |
| Standard Butter Co., | H. A. Ammerman, | Flushing. |
| State Road Cheese Factory, | O. M. Field, | Clio, No. 3. |
| Davison Elgin Creamery Ass'n, | Geo. Gaylord, | Davison. |
| Baker Milk & Butter Co., | Thos. H. Baker, | Flint. |
| Mt. Morris Cheese Factory, | Leonard Freeman, | Fenton. |
| Fenton Cheese Factory and Creamery, | Leonard Freeman, | Fenton. |
| D. W. Richards Cheese Factory, | D. W. Richards, | Flint. |
| Fred Frazier Milk Depot, | Fred Frasier, | Flint. |
| Swartz Creek Cheese Factory, | C. L. Pearson, | Milford. |
| Grand Blanc Cheese & Butter Co., | Thompson & Campbell, | Grand Blanc. |
| S. J. Burns Milk Depot, | S. J. Burns, | Flint. |
| Otisville Elgin Butter Co., | Melvin Wilkins, | Otisville. |

GLADWIN COUNTY.

| | | |
|----------------------------|-----------------------|-----------------|
| Wagerville Cheese Factory, | Wagerville Dairy Co., | Gladwin, No. 1. |
| Billings Cheese Factory, | F. E. Edmunds, | Billings. |

GOGEBIC COUNTY.

| | | |
|--------------------|---------------------------|-----------|
| Ironwood Creamery, | Whittam & Cook (lessees), | Ironwood. |
|--------------------|---------------------------|-----------|

GRAND TRAVERSE COUNTY.

| | | |
|-------------------------------|----------------|----------------|
| Kingsley Cheese Co., | A. B. Stimson, | Kingsley. |
| Queen City Dairy Milk Depot, | Guy DeLong, | Traverse City. |
| Traverse City Elgin Creamery, | Wm. A. McCool, | Traverse City. |

GRATIOT COUNTY.

| | | |
|-------------------------------|---------------------------|---------------|
| Middleton Cheese Factory, | H. P. Fitzpatrick, | Middleton. |
| Central Mich. Produce Co., | T. A. Johnson, | Alma. |
| Sexton-Mortimer Creamery Co., | S. P. Sexton, | Breckenridge. |
| Cream-O Cheese Co., | Chittenden & Aldridge, | Ashley. |
| Ola Cheese Factory, | Peter J. Wolf & Sons, | Pompeii. |
| Ithaca Creamery Co., | Doran & Dingwall, | Ithaca. |
| Perrinton Cheese Factory, | W. A. Dear, | Perrinton. |
| Bannister Cheese Factory, | Milk & Food Products Co., | Elsie. |

HILLSDALE COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|---------------------------------|-------------------------------|----------------|
| D. S. Lickley Cheese Factory, | D. S. Lickley, | Pittsford. |
| Prattville Cheese Factory, | B. L. Peebles, | Prattville. |
| North Adams Creamery Co., Inc., | R. R. Stranger, | North Adams. |
| Litchfield Creamery, | Litchfield Butter Co., | Litchfield. |
| Montgomery Cheese Factory, | Montgomery Cheese Co., | Montgomery. |
| Reading Creamery, | Z. G. Culver, | Reading. |
| Frontier Cheese Factory, | Crow Bros., | Frontier. |
| Bennett Cheese Factory, | O. F. Foster, | Hudson. |
| Pittsford Cheese Factory, | O. F. Foster & Son, | Hudson. |
| Hudson Cheese Factory, | H. M. Carmichael, | Hudson. |
| Somerset Cheese Co., | G. M. Shafer, | Somerset. |
| Treat Cheese Factory, | B. L. Peebles, | Prattville. |
| So. Pittsford Cheese Factory, | Fred J. Dillon, | Hudson. |
| Lotus Corners Cheese Factory, | J. B. Loomis, | Hudson. |
| Hillsdale Elgin Creamery Co., | Frank M. Smith, | Hillsdale. |
| Allen Skimming Station, | Hillsdale Elgin Creamery Co., | Hillsdale. |
| Ransom Cheese Factory, | E. W. Curth, | Osseo, No. 26. |
| Gibbon & Sons Creamery, | Gibbon & Sons, | Reading. |
| Waldron Cheese Factory, | Waldron Cheese Co., | Waldron. |
| Battle Springs Cheese Factory, | J. B. Loomis, | Hudson. |

HURON COUNTY.

| | | |
|--------------------------------------|----------------------------|------------------|
| Ruth Creamery Co., | G. Seltz, | Ruth. |
| American Farm Prod'ts Co. (Bad Axe), | Am. Farm Products Co., | Chicago, Ill. |
| Page Milk Co. (condensed milk), | Page Milk Co., | Uby. |
| Port Hope Cheese Factory, | S. T. Jones, | Port Hope. |
| Redman Cheese Factory, | E. F. Kinch, | Port Hope. |
| Kinch Creamery Co., | Frank Kinch, | Grindstone City. |
| Harbor Beach Creamery, | Frank Kinch, | Grindstone City. |
| Lakeside Creamery, | Frank Kinch, | Grindstone City. |
| Kilmanagh Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Pinnebrog Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Pigeon Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Elmhurst Cheese Factory, | Smith & Warner, | Farmington. |
| Elkton Creamery, | W. T. Leonard & Co., | Norwood, N. Y. |
| Pigeon Butter Co., | Frank Kinch, | Pigeon. |
| Huron County Creamery Co., | J. A. McLean, | Pigeon. |

INGHAM COUNTY.

| | | |
|---------------------------------|---------------------------|--------------|
| Smith & Gilbert Creamery, | Smith & Gilbert, | Williamston. |
| Webberville Skimming Station, | Smith & Gilbert, | Williamston. |
| Leslie Butter Co., | Geo. J. Pullen, | Leslie. |
| Lansing Condensed Milk Factory, | Mich. Condensed Milk Co., | New York. |
| Winans' Milk Depot, | N. H. Winans & Sons, | Lansing. |

IONIA COUNTY.

| | | |
|-------------------------------------|-----------------------|---------------|
| Lake Odessa Condensed Milk Factory, | Lake Odessa Milk Co., | Lake Odessa. |
| Nunneley Bros. Creamery, | Nunneley Bros., | Portland. |
| Saranac Dairy Co., | C. Romander, | Saranac. |
| Orleans Creamery Ass'n, | Chris Liebum, | Orleans. |
| Clarksville Creamery, | John Kloosterman, | Clarksville. |
| J. W. Eaton Creamery, | J. W. Eaton, | Ionla, No. 7. |
| Hubbardston Creamery, | J. S. Doten, | Hubbardston. |
| Palo Skimming Station, | J. S. Doten, | Hubbardston. |

IRON COUNTY.

| | | |
|-----------------------------------|--------------------|-------------|
| Iron River Cheese & Creamery Co., | M. B. Wait, Pres., | Iron River. |
| Bates Cheese Factory, | Mike Krick, | Iron River. |

ISABELLA COUNTY.

| | | |
|--------------------------------|----------------------|----------------|
| Herrick Full Cream Cheese Co., | W. J. Jennings, | Clare. |
| Mt. Pleasant Creamery, | W. T. Leonard & Co., | Norwood, N. Y. |

JACKSON COUNTY.

| | | |
|---------------------------------|---------------------------|----------------------|
| Parma Butter Co., | Joseph Helmer, Sec'y, | Parma. |
| Clarks Lake Creamery Co., | Claude A. Grove, | Clarks Lake. |
| Springport Creamery Co., | Frank Dickenson, | Springport. |
| Brooklyn Creamery Co., | H. W. Brooks, | Brooklyn. |
| Crystal Creamery Co., | E. S. Wilcox, | Concord. |
| Jackson Condensed Milk Factory, | Mich. Condensed Milk Co., | 44 Hudson St., N. Y. |
| Lakeside Elgin Butter Co., | Frank N. Shelly, | Grass Lake. |
| Hanover Creamery Co., | Frederick Smith, | Hanover. |

KALAMAZOO COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|---------------------------------|----------------------|---------------|
| Dairymens Milk Co., | G. E. Martin, | Kalamazoo. |
| Schoolcraft Creamery Co., | Geo. Gilchrist, | Schoolcraft. |
| Scotts Creamery Co., | H. R. White, | Scotts. |
| Alamo Valley Creamery Co., | A. M. Griffith, | Alamo. |
| Bishop Creamery Co., | Jack Bishop, | Buchanan. |
| Riveride Creamery, | F. O. Crossfield, | Calesburg. |
| Kalamazoo Creamery Co. (depot), | N. J. Whitney, | Kalamazoo. |
| Michigan Butter Co., | N. J. Whitney, | Kalamazoo. |
| Climax Skimming Station, | W. H. Brown, | Battle Creek. |
| Fulton Creamery, | Bishop Creamery Co., | Buchanan. |

KENT COUNTY.

| | | |
|---|-----------------------------|----------------|
| Byron Center Creamery Co., | Frank B. Dent, | Byron Center. |
| Mich. Dairy Farms Creamery, | W. S. Brown, | Cedar Springs. |
| Grand Rapids Creamery, | Rudell Creamery, | Grand Rapids. |
| Cedar Springs Creamery, | Rudell Creamery, | Grand Rapids. |
| A. Vonk & Son Milk Depot, | John D. Vonk, | Grand Rapids. |
| Grand Rapids Creamery Co., | H. J. Zoet, | Grand Rapids. |
| Valley City Elgin Creamery, | Bradford, Burns Co., | Grand Rapids. |
| Lowell Cheese Factory, | Mich. M'k & F'd Pr'cts Co., | Elsie. |
| Sanitary Milk Co. (creamery and dep't), | T. W. Goodspeed, | Grand Rapids. |
| Caledonia Skimming Station, | Sanitary Milk Co., | Grand Rapids. |
| Valley City Creamery, | M. T. McNamara, | Grand Rapids. |
| Kent City Cheese Factory, | A. L. Power, | Kent City. |
| Boyland's Creamery, | J. F. Boyland, | Grand Rapids. |

LAPEER COUNTY.

| | | |
|------------------------------|--------------------------|---------------|
| Lum Creamery, | R. F. Kerr, | Lum. |
| Imlay City Creamery Co., | Wm. Muir, | Imlay City. |
| Hadley District Dairy Ass'n, | Frank T. Hadley, | Hadley. |
| Peoples Creamery, | Thos. Stacey, | North Branch. |
| Lapeer County Creamery, | R. F. Frary, | Lapeer. |
| Elba Cheese Factory, | Leonard Freeman, | Fenton. |
| Cartwright's Cheese Factory, | J. F. Cartwright & Sons, | Mayville. |

LENAWEE COUNTY.

| | | |
|---------------------------------|---------------------------|---------------|
| Riverside Cheese Factory, | Baker & Jurden, | Adrian. |
| Rorick Cheese Factory, | G. H. Rorick, | Seneca. |
| Hudson Center Cheese Factory, | Fred J. Dillon, | Hudson. |
| Addison Cheese Factory, | Central Supply Co., | Addison. |
| Rollin Cheese Factory, | B. S. Peebles, | Prattville. |
| Macon Creamery Co., | Granville Mills, | Tecumseh. |
| Cadmus Cheese Factory, | C. H. Garnsey, | Cadmus. |
| Jasper Cheese Factory, | Riverside Co., | Adrian. |
| Lime Creek Cheese Factory, | O. F. Foster & Son, | Hudson. |
| Posey Lake Cheese Factory, | H. M. Carmichael, | Hudson. |
| Deerfield Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Velvet Ice Cream Co., | Geo. Koske, | Adrian. |
| Onsted Cheese Factory, | L. R. Conner, | Onsted. |
| Hudson Creamery Co., | H. E. Loyster, | Hudson. |
| Rollin Skimming Station, | H. E. Loyster, | Hudson. |
| Medina Cheese Factory, | C. C. Colvin & Son, | Medina. |
| North Morenci Cheese Factory, | C. C. Colvin & Son, | Medina. |
| Clayton Cheese Factory, | C. C. Colvin & Son, | Medina. |
| Brown Cheese Factory, | C. C. Colvin & Son, | Medina. |
| Morenci Condensed Milk Factory, | Ohio Dairy Co., | Toledo, O. |
| Rome Center Cheese Factory, | Riverside Co., | Adrian. |
| Lenawee Junction Milk Depot, | Clover Leaf Creamery Co., | Toledo, O. |
| Palmyra Milk Depot, | Clover Leaf Creamery Co., | Toledo, O. |
| Maple City Creamery, | Delano & Barnaby, | Adrian. |
| Canandaigua Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Fruit Ridge Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Bimo Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| South Dover Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Munson Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Fairfield Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Weston Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Sand Creek Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Jasper Cheese Factory, | Geo. B. Horton & Son, | Fruit Ridge. |
| Tecumseh Creamery, | Birdsall & McCoy, | Tecumseh. |
| Ridgeway Skimming Station, | Tecumseh Butter Co., | Tecumseh. |
| Raisin Valley Skimming Station, | Tecumseh Butter Co., | Tecumseh. |
| Lakeside Cheese Co., | C. H. DuBois, | Devils Lake. |

LIVINGSTON COUNTY.

| | | |
|--------------------------------|---------------------------|----------------------|
| Howell Condensed Milk Factory, | Mich. Condensed Milk Co., | 44 Hudson St., N. Y. |
| Brighton Elgin Butter Co., | Carl C. Conrad, | Brighton. |

MACOMB COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|---------------------------------------|------------------------------|----------------|
| Utica Co-operative Creamery Ass'n., | C. H. Firman, Sec'y. | Utica. |
| Disco Skimming Station, | Utica Co-operative Cr'y Co., | Utica. |
| Waldenburg Skimming Station, | Utica Co-operative Cr'y Co., | Utica. |
| Fraser Milk Depot, | Detroit Creamery Co., | Detroit. |
| Warren Milk Depot, | Detroit Creamery Co., | Detroit. |
| Utica Milk Depot, | Detroit Creamery Co., | Detroit. |
| Mt. Clemens Milk Depot, | Detroit Creamery Co., | Detroit. |
| Cady Milk Depot, | Detroit Creamery Co., | Detroit. |
| Armada Creamery, | O. M. Partch, | Armada. |
| Romeo Elgin Creamery Co., | Henry J. McKay, Pres., | Romeo. |
| Blue Ribbon Creamery, | W. H. Chapman & Son, | New Baltimore. |
| New Baltimore Creamery Co., | Chris Schlosser, | New Baltimore. |
| Davis Creamery Co., Ray Twp., | Irving W. Ellis, | Washington. |
| Washington Skimming Station, | Davis Creamery Co., | Davis. |
| Sellecks Skimming Station, | Davis Creamery Co., | Davis. |
| Independent Milk Depot, Warren, Twp., | Geo. Spranger & Son, | Warren. |
| Gatz Creamery Co., | Chas. J. Reinold, | Mt. Clemens. |
| Chesterfield Creamery, | Chesterfield Creamery Co., | Chesterfield. |
| Waldenburg Skimming Station, | Chesterfield Creamery Co., | Chesterfield. |
| Meade Skimming Station, | Chesterfield Creamery Co., | Chesterfield. |
| Mt. Clemens Skimming Station, | Chesterfield Creamery Co., | Chesterfield. |
| New Haven Creamery Co., | J. C. Herriman, | New Haven. |
| Ray Center Skimming Station, | New Haven Creamery Co., | New Haven. |
| Muttonville Skimming Station, | New Haven Creamery Co., | New Haven. |
| Richmond Creamery, | C. Zentgrebe, | Richmond. |

MASON COUNTY.

| | | |
|-----------------|--------------|------------|
| Alpha Creamery, | Axel Kehlet, | Ludington. |
|-----------------|--------------|------------|

MECOSTA COUNTY.

| | | |
|---------------------------|------------------|---------------|
| Remus Co-operative Ass'n, | J. J. Diehm, | Remus. |
| Big Rapids Creamery, | Rudell Creamery, | Grand Rapids. |

MENOMINEE COUNTY.

| | | |
|-----------------------------|--------------------------------|--------------------|
| Michigan Cheese Factory, | Chas. Elliott & Son, | Bark River. |
| Wilson Cheese Factory, | W. M. Bellefevil, | Wilson. |
| Ingalls Creamery, | Ingalls Co-operative Cr'y Co., | Ingalls. |
| Creamery and Milk Depot, | C. I. Cook, | Menominee. |
| Oakwood Cheese Factory, | Adolf Kayser, | Daggett, No. 2. |
| Crane Cheese Factory, | Earle R. Crane, | Carney. |
| Daggett Creamery Co., | Daggett Co-operative Cr'y, | Daggett. |
| Dena Hanson Cheese Factory, | Dena Hanson, | Stephenson. |
| Stephenson Creamery, | Carl G. Bergwall (lessee), | Stephenson. |
| Nadeau Cheese Factory, | S. J. Matheys, | Nadeau. |
| Stephenson Cheese Factory, | John Dupont, | Stephenson, No. 1. |

MIDLAND COUNTY.

| | | |
|--------------------------|-----------------------|-----------------|
| Coleman Creamery Co., | C. H. Keyworth, | Coleman. |
| Vasold Bros. Creamery, | Vasold Bros., | Midland. |
| Lockport Cheese Factory, | A. J. Locke, | Midland, No. 7. |
| Hope Cheese Factory, | M. Seidel Cheese Co., | Midland. |

MISSAUKEE COUNTY.

| | | |
|-----------------------------|-------------|--------|
| Lucas Farmers Creamery Co., | Dick Lucas, | Lucas. |
|-----------------------------|-------------|--------|

MONROE COUNTY.

| | | |
|----------------------------------|-----------------------------|-----------------|
| Grape Cheese Factory, | D. A. Jenkins, | Ida. |
| Maybee Skimming Station, | Towards Wayne Co. Cr'y, | Detroit. |
| Dundee Skimming Station, | Towards Wayne Co. Cr'y, | Detroit. |
| S. Rockwood Butter & Cheese Co., | J. W. Harris, | South Rockwood. |
| Hazelwood Creamery, | Geo. Peters & Son, | Petersburg. |
| Whiteford Creamery, | S. J. Pettie, | Riga, No. 2. |
| Gert Cheese Factory, | Gilhouse & Emerson, | Riga, No. 2. |
| Maybee Cheese Factory, | Geo. F. Helzer, | Maybee. |
| Milk Depot, Ash Twp., | John Hartsig, | Carleton. |
| Monroe Butter & Cheese Factory, | Andrew Vivian, | Monroe. |
| LaSalle Skimming Station, | Monroe Butter & Cheese Co., | Monroe. |
| Stony Creek Skimming Station, | Monroe Butter & Cheese Co., | Monroe. |
| Excelsior Creamery Co., | John Martin, | Ida. |
| Strasburg Skimming Station, | Excelsior Creamery Co., | Ida. |
| Yargerville Skimming Station, | Excelsior Creamery Co., | Ida. |
| Lulu Cheese Factory, | Excelsior Creamery Co., | Ida. |
| Dundee Condensed Milk Factory, | Ohio Dairy Co., | Toledo, O. |
| Newport Creamery, | C. W. Beckham, | Toledo, O. |
| Bedford Twp. Milk Depot No. 1, | Clover Leaf Dairy Co., | Toledo, O. |
| Azalia Milk Depot, | Clover Leaf Dairy Co., | Toledo, O. |
| Bedford Twp. Milk Depot No. 2, | Clover Leaf Dairy Co., | Toledo, O. |

MONTCALM COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|------------------------------|------------------------|---------------|
| Greenville Cheese Co., | S. C. Woodruff, | Greenville. |
| Amble Creamery, | Amble Creamery Co., | Amble. |
| Vestaburg Butter Co., | Wm. Carvis, | Vestaburg. |
| Vickeryville Cheese Factory, | M. C. Johnson, | Vickeryville. |
| Edmore Receiving Station, | Beatrice Creamery Co., | Chicago, Ill. |
| Butternut Cheese Factory, | J. M. Fitzpatrick, | Butternut. |
| Carson City Cheese Factory, | Wilson & Miner, | Carson City. |
| Crystal Cheese Factory, | Wallace A. Grimm, | Crystal. |

MUSKEGON COUNTY.

| | Oscar A. Martin, | Holton. |
|----------------------|------------------|---------------|
| Holton Creamery Co., | Rudell Creamery, | Grand Rapids. |
| Ganovia Creamery, | D. E. Staples, | Montague. |
| Lonsdale Creamery, | Adam Yager, | Muskegon. |
| Peerless Creamery, | E. J. Petersen, | Muskegon. |
| Dalton Creamery, | E. S. Powers, | Ravenna. |
| Ravenna Creamery, | | |

NEWAYGO COUNTY.

| | D. C. Martin, | Wooster. |
|-----------------------------------|--------------------------|-----------------|
| Crystal Lake Creamery, | John Dobben, | Newaygo, No. 1. |
| Bishop Creamery Co., | Egbert Visscher, | Reeman. |
| Reeman Co-operative Creamery Co., | H. Rozema, | Fremont. |
| Fremont Creamery Co., | Rudell Creamery, | Grand Rapids. |
| Grant Creamery, | B. C. Martin, | Wooster. |
| White Cloud Creamery, | J. Van der Molen, Sec'y, | Grant. |
| Creamery (near Grant), | | |

OAKLAND COUNTY.

| | Towards Wayne Co. Cr'y, | Detroit. |
|-------------------------------|----------------------------|-----------------|
| Clarenceville Milk Depot, | Peter Becker, | Royal Oak. |
| Milk Depot, Royal Oak Twp., | E. J. Rice, | New Hudson. |
| New Hudson Cheese Factory, | M. B. Armstrong, | Pontiac. |
| N. Farmington Cheese Factory, | H. C. Stevenson, | South Lyon. |
| South Lyon Creamery Co., | Detroit Creamery Co., | Detroit. |
| Yates Milk Depot, | J. D. Taylor, | Walled Lake. |
| Walled Lake Milk Depot, | Dan Parks, | Redford. |
| Milk Depot, Southfield Twp., | Stoll Bros., | Redford, No. 1. |
| Milk Depot, Redford, No. 1, | Fred Stoll, | Redford, No. 1. |
| Milk Depot, Southfield, | Fred M. Warner Cheese Co., | Farmington. |
| Franklin Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Springbrook Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Powers Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Novi Cheese Factory, | Fred M. Warner Cheese Co., | Farmington. |
| Farmington Cheese Factory, | C. L. Pearson, | Milford. |
| Milford Cheese Factory, | H. A. Smith, | Wixom. |
| Wixom Cheese Factory, | H. A. Smith, | Wixom. |
| Walled Lake Cheese Factory, | W. T. Leonard & Co., | Norwood, N. Y. |
| Oxford Creamery, | | |

OCEANA COUNTY.

| | Walter E. Lochlin, | Shelby. |
|--------------------------------|-----------------------|-----------|
| Shelby Dairy Co., | E. M. Fuller, | Montague. |
| Oceana Creamery Co., | D. E. Staples, | Montague. |
| Rothburg Skimming Station, | Edwin K. Smith, | Hart. |
| Hart Creamery Co., | E. S. Powers, | Ravenna. |
| White River Creamery, | Geo. C. Myers, Sec'y, | Shelby. |
| Shelby & New Era Creamery Co., | | |

OSCEOLA COUNTY.

| | Axel Kehlet, | Ludington. |
|------------------|-------------------|------------|
| Alpha Creamery, | Chas. A. Rowe, | Tustin. |
| Tustin Creamery, | D. B. Ketchum, | LeRoy. |
| LeRoy Creamery, | Maloney & Palmer, | Marion. |
| Marion Creamery, | D. B. Ketchum, | LeRoy. |
| Hersey Creamery, | | |

OTTAWA COUNTY.

| | W. D. Dubendorf, | Coopersville. |
|----------------------------------|------------------------------|----------------------|
| Co-operative Creamery Co., | Co-operative Creamery Co., | Coopersville. |
| Nunica Skimming Station, | Co-operative Creamery Co., | Coopersville. |
| Berlin Skimming Station, | A. J. Nienhuis, | Holland, No. 2. |
| Crisp Creamery Co., | J. Brouwer, | Zeeland. |
| Zeeland Cheese & Butter Co., | Zeeland Cheese & Butter Co., | Zeeland. |
| Blendon Skimming Station, | B. W. Welton, | West Olive, No. 2. |
| Banner Creamery Co., | Henry Rock, | Vriesland. |
| Vriesland Creamery Co., | John Van Rhea, | Hudsonville, No. 4. |
| Interurban Creamery Co., | Henry B. Garrison, | Coopersville, No. 3. |
| Grand River Valley Creamery Co., | R. P. Cory, | Hudsonville. |
| Hudsonville Creamery Co., | C. J. Lokker & Co., | Holland. |
| Holland Crystal Creamery, | C. J. Lokker & Co., | Holland. |
| Noordeloos Skimming Station, | | |

OTTAWA COUNTY.—Continued.

| Name. | Owner or Manager. | Postoffice. |
|--------------------------------------|-------------------------|---------------------|
| Jamestown Co-operative Creamery Co., | Jacob Nyenhuis. | Hudsonville, No. 3. |
| Skimming Station, Jamestown Twp., | Jamestown Co-op'e Cr'y, | Hudsonville, No. 3. |
| Allendale Creamery Co., | Mrs. H. T. Pierson, | Allendale. |
| Drenthe Co-operative Creamery Co., | Henry Wever, | Zeeland, No. 3. |
| Dennison Skimming Station, | Michigan Dairy Farms, | Chicago, Ill. |
| Harlem Creamery Co., | R. Dykema, | Holland, No. 4. |
| Bauer Creamery Co., | Abel Dykstra, | Hudsonville, No. 5. |
| West Skimming Station, | Bauer Creamery Co., | Bauer. |
| Borculo Creamery Co., | H. Koop, | Borculo. |
| Beaverdam Co-operative Creamery, | John Jager, | Zeeland, No. 2. |

SAGINAW COUNTY.

| | | |
|-----------------------------------|-----------------------------|-------------------------|
| Blackman Cheese Co., | W. A. Judd, | Fosters, No. 1. |
| Oakley Butter Co., | J. B. Hoffman, | Oakley. |
| Saginaw Receiving Station, | Amer. Farm Products Co., | Owosso. |
| Merrill Receiving Station, | Amer. Farm Products Co., | Owosso. |
| Frankenmuth Cheese Mfg. Co., | L. Hubinger, | Frankenmuth. |
| Maple Grove Elgin Butter Factory, | M. D. Ireland, | New Lathrop. |
| Lawndale Creamery, | C. F. Berger, | Saginaw, W. S., No. 12. |
| Standard Butter Co. (Burt), | H. A. Ammerman, | Flushing. |
| Wilson Cheese Factory Ass'n, | F. L. Kent, | Birch Run. |
| Union Cheese Mfg. Co., | Conrad Schriener, | Frankenmuth, No. 2. |
| Gera Creamery, | P. C. Mossner, | Gera. |
| Dudley Butter Co., Saginaw, | Dudley Butter Co., | Owosso. |
| Star Cheese Factory, | Rupprecht & Schellhas, | Frankenmuth. |
| Cass River Cheese Factory, | Hubinger Bros., | Frankenmuth. |
| Standard Cheese Co., | Standard Cheese Co., | Birch Run, No. 1. |
| South Branch Cheese Co., | C. F. Gibbs, Treas., | Brant. |
| Birch Run Cheese Factory, | Geo. Pickleman, | Birch Run. |
| Brant Cheese Factory, | T. A. Cook, | Brant. |
| Chapin Cheese Co., | G. C. Peters, | Chapin. |
| Freeland Creamery, | Vasold Bros., | Midland. |
| Cheese Factory and Creamery, | John C. Malone, | Burt. |
| Taymouth Cheese Factory, | James W. Morse, | Birch Run, No. 2. |
| Fenmore Cheese Factory, | Mich. M'k & F'd Pr'cts Co., | Elsie. |
| Chesaning Receiving Station, | C. L. Lee, | Chesaning. |
| Hemlock Creamery Co., | Wm. Pahl, | Hemlock. |

SANILAC COUNTY.

| | | |
|-----------------------------------|--------------------------|---------------------|
| Brown City Creamery, | Equity Creamery Co., | Buffalo, N. Y. |
| Marlette Creamery, | Equity Creamery Co., | Buffalo, N. Y. |
| Greenleaf Creamery Co., | A. McCallum, | Cass City. |
| Roseburg Creamery Co., | Wm. Hodgins, | Yale, No. 5. |
| Brown City Cream Station, | Amer. Farm Products Co., | Owosso. |
| Peck Creamery Co., | M. J. Griffith, | Peck. |
| Elmer Creamery Co., | Kerr & Gamble, | Sandusky. |
| Shabbona Creamery Co., | W. F. Ehlers, Sec'y, | Shabbona. |
| Brown City Cream Station, | Port Huron Creamery Co., | Port Huron. |
| Union Creamery Co., | Frank S. Burgess, | Deckerville, No. 4. |
| Minden City Creamery Co., | A. B. Conant, | Minden City. |
| Marlette Cream Station, | Port Huron Creamery Co., | Port Huron. |
| Sandusky Creamery, | W. T. Leonard & Co., | Norwood, N. Y. |
| Applegate Creamery, | W. T. Leonard & Co., | Norwood, N. Y. |
| Mayflower Creamery (Deckerville), | W. T. Leonard & Co., | Norwood, N. Y. |
| Melvin Creamery Co., | W. J. Laidlow, | Melvin. |

SHIAWASSEE COUNTY.

| | | |
|--------------------------------|---------------------------|-------------|
| Durand Creamery Co., | C. E. Van Slyke, | Durand. |
| Owosso Creamery, | Amer. Farm Products Co., | Owosso. |
| Bishop Creamery Co. (Morrice), | Jack Bishop, | Buchanan. |
| Owosso Milk Depot, | O. C. Launstein, | Owosso. |
| Dudley Butter Co., | Dudley Butter Co., | Owosso. |
| Carland Cheese Co., | A. E. Shannon, | Carland. |
| Perry Cheese Factory, | Leonard Freeman, | Fenton. |
| Owosso Milk Depot, | C. J. Thomas, | Owosso. |
| Bennington Creamery Co., | Drury & Ruess, | Bennington. |
| Milk Depot (Owosso), | E. A. Lotridge, | Owosso. |
| Burton Cheese Factory, | Milk & Food Products Co., | Elsie. |
| Henderson Butter Co., | A. P. Baker, | Henderson. |
| Byron Cheese Factory, | R. A. Murray, | Byron. |

ST. CLAIR COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|--------------------------------------|----------------------------|-----------------------|
| Review Cheese Factory, | Andrew Hahn, | Marine City, No. 3. |
| Maple Grove Cheese Factory. | Simon Babbe & Co., | Marine City, No. 3. |
| Berville Creamery Co., | R. Workman, | Berville. |
| Port Huron Creamery, | Amer. Farm Products Co., | Chicago and New York. |
| Yale Cream Station, | Amer. Farm Products Co., | Chicago and New York. |
| Germania Cheese Factory, | Germania Cheese Co., | Marine City, No. 3. |
| Yale Creamery Co., | James Wallace, | Yale. |
| St. Clair Creamery Co., | Ruff & Otter, | St. Clair. |
| Port Huron Creamery Co., | Ruff & Otter, | St. Clair. |
| Hillside Skimming Station, | Ruff & Otter, | St. Clair. |
| Smiths Creek Creamery, | Sexton-Mortimer Cr'y Co., | Breckenridge. |
| Capac Creamery Co., | Capac Creamery Co., | Capac. |
| Casco Creamery, | Chas. Zentgrebe, | Lenox, No. 1. |
| Myers Station, | Chesterfield Creamery Co., | Chesterfield. |
| Adair Skimming Station, | Chas. Zentgrebe, | Lenox. |
| Avoca Butter Co., | T. E. Hill, | Avoca. |
| Lilly Cheese Co., | Wm. Koch, | Marine City, No. 1. |
| Koch's Skimming Station, Casco Twp., | Chesterfield Creamery Co., | Mt. Clemens. |

ST. JOSEPH COUNTY.

| | | |
|----------------------------|-------------------|---------------|
| Constantine Creamery Co., | Wm. H. Barnard, | Constantine. |
| Burr Oak Creamery Co., | G. C. Ultz, | Burr Oak. |
| Colon Creamery Co., | D. L. Akey, | Colon. |
| White Pigeon Creamery Co., | Jesse E. Hagerty, | White Pigeon. |
| Maple Lawn Creamery, | Verne Olney, | Mendon. |
| Mendon Creamery Co., | P. N. Marantette, | Mendon. |
| Centerville Creamery, | R. M. Cauffman, | Centerville. |

TUSCOLA COUNTY.

| | | |
|-------------------------------------|-----------------------------|-----------------------------|
| Richville Creamery, | Sakewitz, McMil'n & Bowm'n, | Detroit. |
| Vassar Creamery, | Sakewitz, McMil'n & Bowm'n, | Detroit. |
| Tuscola Cheese Factory, | G. W. Dimond, | Tuscola. |
| Dayton Cheese Factory, | Alfred Waela, | Caro. |
| Caro Creamery, | Thumb Co-oper'e Cr'y Co., | Caro. |
| Cass City Creamery, | Thumb Co-oper'e Cr'y Co., | Caro. |
| Reese Creamery, | Henry Munger, | Reese. |
| Unionville Creamery Co., Ltd., | H. G. Spring, | Unionville. |
| Arbela Cheese Co., | Arbela Cheese Co., | Millington, R. F. D. No. 1. |
| Cartwright's Cheese Factory, | J. F. Cartwright & Sons, | Mayville. |
| Fostoria Cheese Factory, | Leonard Freeman, | Fenton. |
| Akron Cheese Factory, | Mallory Bros., | Akron. |
| Millington Butter & Cheese Factory, | Geo. Spaulding, | Millington. |
| Silverwood Cheese Factory, | A. L. Rice, | Silverwood. |
| Gagetown Cheese Factory, | F. M. Warner Cheese Co., | Farmington. |
| Pleasant View Skimming Station, | Thumb Co-oper'e Cr'y Co., | Caro. |

VAN BUREN COUNTY.

| | | |
|-------------------------------------|----------------------------|---------------------|
| Gobleville Creamery Co., | Geo. W. Lyle, | Gobleville. |
| McDonald Creamery Ass'n. | Henry R. Goss, | McDonald. |
| Glendale Co-operative Creamery Co., | M. J. Sherred, | Bloomington, No. 2. |
| Arlington Skimming Station, | Glendale Co-operative Co., | Bloomington, No. 2. |
| Decatur Creamery Co., | E. L. Cady, | Decatur. |
| Base Line Cheese Factory, | Lynn Reid, | Bloomington. |
| Bloomington Creamery, | Chas. Linton, | Bloomington. |
| Berlamont Skimming Station, | Chas. Linton, | Bloomington. |
| Breedsville Skimming Station, | Chas. Linton, | Bloomington. |
| Lawrence Co-operative Creamery Co., | Harvey W. Chapman, | Lawrence. |
| Almena Creamery, | C. A. Finch, | Paw Paw, No. 6. |

WASHTENAW COUNTY.

| | | |
|---------------------------------|-------------------------|-------------------|
| Sharon Twp. Cheese Factory, | Gillhouse & Zorn, | Manchester. |
| Chelsea Skimming Station, | Towards Wayne Co. Cr'y, | Detroit. |
| Dexter Creamery, | Towards Wayne Co. Cr'y, | Detroit. |
| Whittaker Skimming Station, | Towards Wayne Co. Cr'y, | Detroit. |
| Saline Butter & Cheese Co., | E. O. Hauser, | Saline. |
| Flak Creamery Co., | J. C. & H. W. Flak, | Clinton. |
| Lyndon Cheese & Butter Co., | Samuel Boyer, | Stockbridge. |
| Salem Milk Depot, | Detroit Creamery Co., | Detroit. |
| Pittsfield Milk Depot, | Frank Begole, | Ypsilanti. |
| Dixboro Dairy Ass'n, | Shankland & Bush, | Ann Arbor, No. 8. |
| Milk Depot (Ann Arbor), | Blaess & Laubengayer, | Ann Arbor. |
| Ypsilanti Dairy Ass'n, | S. A. Wiard, | Ypsilanti. |
| Skimming Station, Augusta Twp., | Ypsilanti Dairy Ass'n, | Ypsilanti. |
| F. J. Fletcher & Co. Creamery, | Chas. Ruthruff, | Willis. |
| Colonial Creamery (Ypsilanti), | Chas. L. Foster, Sec'y, | Ypsilanti. |
| Milk Depot (Milan), | W. F. Allen, | Milan. |
| Milk Depot (Ann Arbor), | Wurster Bros., | Ann Arbor. |
| Worden Creamery, | Delbert Curtis, | Plymouth. |

WAYNE COUNTY.

| Name. | Owner or Manager. | Postoffice. |
|---------------------------------------|---------------------------------|----------------------------|
| Detroit Dairy Co. Milk Depot, | Detroit D'y Co., 99 Elm St., | Detroit. |
| Belleville Creamery, | Van Buren Creamery Co., | Belleville. |
| Belle Isle Creamery, | H. Laethem, 282 Sheri'n Av., | Belleville. |
| Bedford Milk Depot, | Towards Wayne Co. Cr'y, | Detroit. |
| Beech Milk Depot, | Towards Wayne Co. Cr'y, | Detroit. |
| Romulus Milk Depot, | Towards Wayne Co. Cr'y, | Detroit. |
| Denton Milk Depot, | Towards Wayne Co. Cr'y, | Detroit. |
| F. A. Gillam Milk Depot, | F. A. Gillam, 63 Melrose Av., | Detroit. |
| West Sumpter Creamery Ass'n, | Henry Wallace, | Belleville, No. 4. |
| Rosebud Creamery, | C. Phillipski, 252 Grandy Av., | Detroit. |
| Waltz Cheese Factory, | Robert Waltz, | Waltz. |
| Johnson Milk Depot, | Johnson Milk Co., | Wyandotte. |
| Frank R. Smith Milk Depot, | F. R. Smith, 83 Melrose Av., | Detroit. |
| Inkster Milk Depot, | M. V. Fisher, | Inkster. |
| A. Krausman Milk Depot, | A. Krausman, 916 St. Aubin | Detroit. |
| | Ave., | Detroit. |
| Detroit Milk Depot, | Detroit Creamery Co., | Detroit. |
| Hand Milk Depot, | Detroit Creamery Co., | Detroit. |
| Holland Corners Milk Depot, | Detroit Creamery Co., | Detroit. |
| Dearborn Milk Depot, | Detroit Creamery Co., | Detroit. |
| Perrinsville Milk Depot, | Detroit Creamery Co., | Detroit. |
| Inkster Milk Depot, | Detroit Creamery Co., | Detroit. |
| Preston Milk Depot, | Detroit Creamery Co., | Detroit. |
| Stark Milk Depot, | Detroit Creamery Co., | Detroit. |
| Flat Rock Milk Depot, | Detroit Creamery Co., | Detroit. |
| Sheldon Milk Depot, | Detroit Creamery Co., | Detroit. |
| Elm Milk Depot, | Detroit Creamery Co., | Detroit. |
| Wayne Creamery Co., | Anthony A. Snyder, | Wayne. |
| Shipping Station (Dearborn), | Tony Schlaff, | Dearborn. |
| H. Gordon Milk Depot, | H. Gordon, 264 Winder St., | Detroit. |
| Troy Milk Co. (milk depot), | Troy Milk Co., 55 Baltimore | Detroit. |
| | Ave., | Detroit. |
| Milk Depot (Detroit), | Buss, Schutt & Blackett, 147 | Detroit. |
| | Pierce St., | Detroit. |
| Evergreen Milk Depot, | F. D. Stricker, 55-57 Russell | Detroit. |
| | St., | Detroit. |
| Maplecroft Creamery (milk depot), | G. Peacock, 364 Greenwood | Detroit. |
| | Ave., | Detroit. |
| Chas. L. Bossardet Milk Depot, | Chas. L. Bossardet, 1227 Wa- | Detroit. |
| | bash Ave., | Detroit. |
| Ypsilanti Dairy Ass'n (Canton), | Ypsilanti Dairy Ass'n, | Ypsilanti. |
| W. M. Dickinson, Jr. Milk Depot, | W. M. Dickinson, Jr., 1467 Jos. | Detroit. |
| | Campau Ave., | Detroit. |
| Anthony Lazorowicz Milk Depot, | A. Lazorowicz, 636 Frederick | Detroit. |
| | St., | Detroit. |
| J. R. Smith Creamery (Detroit), | J. R. Smith, 232 Milwaukee | Detroit. |
| | Ave., | Detroit. |
| Clarenceville Milk Depot, | Johnson & Dohany, | Farmington, R. F. D. |
| E. M. Starkweather Milk Depot, | E. M. Starkweather, | Northville. |
| Watson Creamery (Detroit), | Wm. L. Watson, 223 Moran | Detroit. |
| | St., | Detroit. |
| Michigan Milk Depot (Hamtramck), | Robert Dickinson, | Hamtramck. |
| Plymouth Creamery Co., | John W. Henderson, | Plymouth. |
| F. C. Frank Milk Depot, | F. C. Frank, 271 Philadel- | Detroit. |
| | phia Ave., | Detroit. |
| Plymouth Cheese Factory, | F. M. Warner Cheese Co., | Farmington. |
| Livonia Cheese Factory, | F. M. Warner Cheese Co., | Farmington. |
| Northville Condensing & Cheese Fac'y, | Warner & Richardson, | Farmington and Northville. |
| Frank G. Kreuger Creamery (Detroit), | Frank G. Kreuger, 358 An- | Detroit. |
| | tletam St., | Detroit. |
| Baldwin Creamery, | Wm. J. Mutton, 886 Baldwin | Detroit. |
| | Ave., | Detroit. |
| Gilt Edge Cheese Factory, | Frank E. Bradley, | Farmington. |
| Cottage Grove Creamery, | A. P. Fick, | 104-106 Beals, Detroit. |

LAWS AND DECISIONS.

LAWS OF MICHIGAN
RELATIVE TO
INSPECTION AND ADULTERATION OF FOODS.

POWERS AND DUTIES OF THE COMMISSION.

AN ACT to provide for the appointment of a Dairy and Food Commissioner, and to define his powers and duties and fix his compensation.

(Act No. 211, Public Acts, 1893.)

The People of the State of Michigan enact:

1. (C. L., 4973) Section 1. That within thirty days after this act shall take effect the Governor, by and with the consent of the Senate, shall appoint a suitable person to be Dairy and Food Commissioner, which office is hereby created, and which commissioner so appointed shall hold his office until the first day of January, one thousand eight hundred and ninety-five, and until his successor is appointed and qualified. At the next regular session of the Legislature and every two years thereafter, the Governor, by and with the advice and consent of the Senate, shall appoint a Dairy and Food Commissioner, who shall hold his office for the term of two years from the first day of January in the year of his appointment and until his successor is appointed and qualified.

2. (C. L., 4974) Sec. 2. The Governor shall have power to remove such commissioner at any time in his discretion; but the reasons for such removal shall be laid before the Senate at the next regular or special session of the Legislature thereafter, and in case of a vacancy in the office of commissioner from any cause, the Governor may appoint another person to fill the same.

3. (C. L., 4975) Sec. 3. Before entering upon the duties of his office, the person so appointed shall make, subscribe, and file in the office of the Secretary of State, an oath of office in the form prescribed by section one of article eighteen of the constitution of this State, and shall enter into bonds with the people of the State of Michigan in the sum of ten thousand dollars, with sureties to be approved by the Governor, conditioned for the faithful performance of his duties.

4. (C. L., 4976) Sec. 4. Said commissioner shall receive an annual salary of two thousand dollars. The said commissioner is hereby authorized and empowered, by and with the advice and consent of the

Governor, to appoint a deputy commissioner. The salary of the deputy commissioner shall be fifteen hundred dollars per annum. The said commissioner may also appoint eight regular inspectors, who shall receive an annual salary not to exceed one thousand dollars per year, and such other special inspectors as the proper performance of the duties of the office may require, which special inspectors shall be paid not to exceed three dollars per day for time actually employed: Provided, That the amount paid such special inspectors any one fiscal year shall not exceed six thousand dollars. The persons so appointed shall have power to administer oaths in all matters relative to the dairy and food laws and shall take and subscribe the constitutional oath of office and file the same in the office of the Secretary of State; and they shall hold office during the pleasure of the commissioner. The inspectors shall have the same right of access to the places to be inspected as the said commissioner or his deputy. The commissioner shall appoint such clerks as he may deem necessary for the transaction of the business of his office. The salaries and expenses authorized by this section shall be for the unexpired part of the fiscal year ending June thirty, nineteen hundred five, and each fiscal year thereafter. Said salaries are to be paid monthly on the warrant of the Auditor General. The actual and necessary expenses of the commissioner, deputy and inspectors, in the performance of their official duties, shall be audited by the State Board of Auditors and paid upon the warrant of the Auditor General. Such compensation and expenses shall be certified, audited and paid in the same manner as salaries and expenses paid similar officers. The deputy commissioner and inspectors shall enter into bonds with the people of the State of Michigan in the sum of five thousand dollars each, with sureties to be approved by the commissioner, conditioned for the faithful performance of their respective duties. The Board of State Auditors shall provide office room, and the necessary furniture and fixtures and the necessary stationery, supplies and printing for the conducting of the business of said commissioner, on his application to said board therefor. Said office shall be and remain in the city of Lansing.

Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 186, P. A. 1901. Am. by Act No. 230, P. A. 1903. Am. by Act No. 12, P. A. 1905.

5. (C. L., 4977) Sec. 5. The commissioner, by and with the consent of the Governor, shall appoint a suitable and competent person as State analyst, who shall be a practical analytical chemist. The commissioner, in like manner, may appoint an assistant chemist. Before entering upon the duties of their offices, the analyst and assistant chemist shall take, subscribe and file in the office of the Secretary of State the constitutional oath of office. Their term of office shall continue during the pleasure of the commissioner. The Board of State Auditors shall provide a room in connection with the Dairy and Food Commissioner for the laboratory of the State analyst and his assistant, and the necessary furniture and fixtures therefor. In case of the absence or inability of the State analyst or his assistant to perform his duty, the commissioner may appoint some competent person to perform the same temporarily, which person shall take, subscribe and file the constitutional oath of office. The salaries and expenses authorized by this sec-

tion shall be for the unexpired part of the fiscal year ending June thirty, nineteen hundred five, and each fiscal year thereafter, said salaries to be payable monthly on the warrant of the Auditor General. The salary of the chemist shall be not to exceed two thousand dollars; the salary of the assistant chemist shall be not to exceed twelve hundred dollars. The actual and necessary expenses of the chemist and the assistant chemist, in the performance of their official duties, shall be audited by the Board of State Auditors, and paid upon the warrant of the Auditor General. Such an amount as is found to be necessary in the proper performance of the work of the analyst may be expended for chemical supplies. Such compensations, expenses and supplies shall be certified, audited and paid in the same manner as the salaries, expenses and supplies of similar officers.

Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 186, P. A. 1901. Am. by Act No. 230, P. A. 1903. Am. by Act No. 12, P. A. 1905.

6. (C. L., 4978) Sec. 6. It shall be the duty of the Dairy and Food Commissioner to carefully inquire into the dairy and food and drink products and the several articles which are foods or drinks, or the necessary constituents of foods or drinks, which are manufactured or sold or exposed or offered for sale in this State, and he may, in a lawful manner, procure samples of the same and direct the State analyst to make due and careful examination of the same, and report to the commissioner the result of the analysis of all and any of such food and drink products or dairy products as are adulterated, impure or unwholesome in contravention of the laws of this State; and it shall be the duty of the commissioner to make a complaint against the manufacturer or vendor thereof in the proper county and furnish all evidence thereof, to obtain a conviction of the offense charged. The Dairy and Food Commissioner, or his deputy, or any person appointed by him for that purpose may make complaint and cause proceedings to be commenced against any person for the enforcement of any of the laws relative to adulterated, impure or unwholesome food or drink, and in such case he shall not be obliged to furnish security for costs and shall have power, in the performance of his duties, to enter into any creamery, factory, store, salesroom, drug store, or laboratory, or place where he has reason to believe food or drink is made, stored, sold or offered for sale and open any cask, tub, jar, bottle or package containing, or supposed to contain, any article of food or drink and examine or cause to be examined the contents thereof, and take therefrom samples for analysis. The person making such inspection shall take such sample of such article or product in the presence of at least one witness, and he shall, in the presence of said witness, mark or seal such sample and shall tender at the time of taking to the manufacturer or vendor of such product, or to the person having the custody of the same, the value thereof, and a statement in writing for the taking of such sample. Whenever it is determined by the Dairy and Food Commissioner, his deputy or inspectors, that filthy or unsanitary conditions exist, or are permitted to exist in the operation of any bakery, confectionery, or ice cream plant, or in any place where any food or drink products are manufactured, stored, deposited or sold for any purpose whatever, the

proprietor or proprietors, owner or owners, of such bakery, confectionery or ice cream plant, or any person or persons owning or operating any plant where any food or drink products are manufactured, stored, deposited or sold, shall be first notified and warned by the commissioner, his deputy or inspectors to place such bakery, confectionery or ice cream plant, or any place where any food or drink products are manufactured, stored, deposited or sold in a sanitary condition within a reasonable length of time; and any person or persons owning and operating any bakery, confectionery or ice cream plant or any place where any food or drink products are manufactured, stored, deposited or sold, failing to obey such notice and warning, shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine of not less than twenty-five dollars nor more than three hundred dollars and costs of prosecution, or imprisonment in the county jail not to exceed ninety days, or until such fine and costs are paid, or both fine and imprisonment at the discretion of the court.

Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 268, P. A. 1899. Am. by Act No. 12, P. A. 1905.

7. (C. L., 4979) Sec. 7. The commissioner, his deputy or any person by said commissioner duly appointed for that purpose, is authorized at all times to seize and take possession of any and all food and dairy products, substitutes therefor, or imitations thereof kept for sale, exposed for sale, or held in possession or under the control of any person which in the opinion of the said commissioner, or his deputy, or such person by him duly appointed, shall be contrary to the provisions of this act or other laws which now exist or which may be hereafter enacted.

First, The person so making such seizure as aforesaid, shall take from such goods as seized a sample for the purpose of analysis and shall cause the remainder thereof to be boxed and sealed and shall leave the same in the possession of the person from whom they were seized, subject to such disposition as shall hereafter be made thereof according to the provisions of this act.

Second, The person so making such seizure, shall forward the sample so taken to the State analyst for analysis, who shall make an analysis of the same and shall certify the results of such analysis, which certificate shall be prima facie evidence of the fact or facts therein certified to in any court where the same may be offered in evidence.

Third, If upon such analysis it shall appear that said food or dairy products are adulterated, substitutes or imitations within the meaning of this act, said commissioner, or his deputy or any person by him duly authorized may make complaint before any justice of the peace or police justice having jurisdiction in the city, village or township where such goods were seized, and thereupon said justice of the peace shall issue his summons to the person from whom said goods were seized, directing him to appear not less than six nor not more than twelve days from the date of the issuing of said summons and show cause why said goods should not be condemned and disposed of. If the said person from whom said goods were seized cannot be found said summons shall be served upon the person then in possession of the goods. The said sum-

mons shall be served at least six days before the time of appearance mentioned therein. If the person from whom said goods were seized cannot be found, and no one can be found in possession of said goods, and the defendants shall not appear on the return day, then said justice of the peace shall proceed in said cause in the same manner provided by law where a writ of attachment is returned not personally served upon any of the defendants and none of the defendants shall appear upon the return day.

Fourth, Unless cause to the contrary thereof is shown, or if said goods shall be found upon trial to be in violation of any of the provisions of this act or other laws which now exist or which may be hereafter enacted, it shall be the duty of said justice of the peace or police justice to render judgment that said seized property be forfeited to the State of Michigan, and that the said goods be destroyed or sold by the said commissioner for any purpose other than to be used for food. The mode of procedure before said justice shall be the same, as near as may be, as in civil proceedings before justices of the peace. Either parties may appeal to the circuit court as appeals are taken from justices' courts, but it shall not be necessary for the people to give any appeal bond.

Fifth, The proceeds arising from any such sale shall be paid into the State treasury and credited to the general fund: Provided, That if the owner or party claiming the property or goods so declared forfeited can produce and prove a written guaranty of purity, signed by the wholesaler, jobber, manufacturer or other party from whom said articles were purchased, then the proceeds of the sale of such articles, over and above the costs of seizure, forfeiture, and sale, shall be paid over to such owner or claimant to reimburse him, to the extent of such surplus, for his actual loss resulting from such seizure and forfeiture, as shown by the invoice.

Sixth, It shall be the duty of each prosecuting attorney when called upon by said commissioner or by any person by him authorized as aforesaid, to render any legal assistance in his power in proceedings under the provisions of this act, or any subsequent act relative to the adulteration of food, for the sale of impure or unwholesome food or food products.

Am. by Act No. 245, P. A. 1895. Am. by Act No. 268, P. A. 1899. Am. by Act No. 230, P. A. 1903.

8. (C. L., 4980) Sec. 8. It shall be unlawful for the State analyst, while he holds his office to furnish to any individual, firm or corporation, any certificate as to the purity or excellence of any article manufactured or sold by them to be used as food or in the preparation of food.

9. (C. L., 4981) Sec. 9. The commissioner shall make an annual report to the Governor on or before the first day of July in each year, and which shall be printed and published on or before the first day of September next thereafter, which report shall cover the doings of his office for the preceding fiscal year, which shall show, among other things, the number of manufactories and other places inspected and by whom, the number of specimens of food articles analyzed, and the State

analyst's report upon each one; the number of complaints entered against persons for violation of the laws relative to the adulteration of food, the number of convictions had, and the amount of fines imposed therefor, together with such recommendations relative to the statutes in force as his experience may justify. The commissioner shall also prepare, print and distribute to all the papers of the State, and to such persons as may be interested or may apply therefor, a monthly bulletin, in suitable paper covers, containing results of inspections, the results of analyses made by the State analyst, with popular explanation of the same, and such other information as may come to him in his official capacity relating to the adulteration of food and drink products and of dairy products, so far as he may deem the same of benefit and advantage to the public; also a brief summary of all the work done during the month by the commissioner and his assistants in the enforcement of the laws of the State, but not more than ten thousand copies of each such monthly bulletin shall be printed.

Am. by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 268, P. A. 1899.

10. (C. L., 4982) Sec. 10. Any person who shall willfully hinder or obstruct the Dairy and Food Commissioner, or his deputy or other person or inspector by him duly authorized, in the exercise of the powers conferred upon him by this act, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than ten dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than ten days nor more than ninety days, or both such fine and imprisonment in the discretion of the court.

Added by Act No 245, 1895.

11. (C. L., 4983) Sec. 11. The sum of thirty-five thousand dollars is hereby appropriated for the fiscal year ending June thirty, nineteen hundred six, and for each fiscal year thereafter, there is hereby appropriated the sum of thirty-five thousand dollars. Out of the amounts appropriated by this act shall be paid all salaries and expenses and chemical supplies provided for therein: Provided, That all expenses for stationery and printing shall be audited and paid in the same manner as other State printing and stationery.

Added by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 268, P. A. 1899. Am. by Act No. 186, P. A. 1901. Am. by Act No. 12, P. A. 1905.

12. (C. L., 4984) Sec. 12. The Auditor General is hereby directed to annually add to and incorporate into the State tax, to be levied each year, the sum of thirty-five thousand dollars which, when collected shall be credited to the general fund to reimburse the same for the money appropriated by this act.

Added by Act No. 245, P. A. 1895. Am. by Act No. 154, P. A. 1897. Am. by Act No. 268, P. A. 1899. Am. by Act No. 186, P. A. 1901. Am. by Act No. 230, P. A. 1903. Am. by Act No. 12, P. A. 1905.

13. Sec. 13. It shall also be the duty of the Dairy and Food Commissioner to foster and encourage the dairy industry of the State, and, for that purpose, he shall investigate the general conditions of the creameries, cheese factories, condensed milk factories, skimming stations, milk stations and farm dairies in this State, with full power to enter upon any premises, for such investigation, with the object in view of improving the quality and creating and maintaining uniformity of the dairy products of the State; and should it become necessary, in the judgment of the Dairy and Food Commissioner, he may cause instruction to be given in any creamery, cheese factory, condensed milk factory, skimming station, milk station, or farm dairy, or in any locality in this State, and in order to secure the proper feeding and care of cows, or the practical operation of any plant producing dairy products, and in order to secure such a uniform and standard quality of dairy products in this State, he shall furnish a sufficient number of competent inspectors, the appointment of whom is provided for in section four of this act, and they shall be duly qualified to act as such inspectors.

Added by Act No. 12, P. A. 1905.

14. Sec. 14. Whenever it is determined by the Dairy and Food Commissioner, his deputy or inspectors, that any person is using, selling or furnishing to any skimming station, creamery, cheese factory, condensed milk factory, milk depot, farm dairy, milk dealer, the retail trade or to any consumer of milk, any impure or unwholesome milk or cream, which impurity or unwholesomeness is caused by the unsanitary or filthy condition of the premises where cows are kept, or by the unsanitary or filthy care or handling of the cows, or from the use of unclean utensils or from unwholesome food, or from any other cause, the person so using, selling or furnishing to any skimming station, creamery, cheese factory, condensed milk factory, milk depot, farm dairy, milk dealer, the retail trade, or to any consumer of milk, any such milk or cream, shall first be notified and warned by the commissioner, his deputy or inspectors not to use, sell, or furnish such milk or cream to such skimming station, creamery, cheese factory, condensed milk factory, milk depot, farm dairy, milk dealer, the retail trade, or to any consumer of milk and any person failing to obey such notice and warning, and continuing to use, sell or furnish to any skimming station, creamery, cheese factory, condensed milk factory, farm dairy, milk dealer, or to the retail trade such impure or unwholesome milk or cream, shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not less than ten dollars, nor more than fifty dollars, and costs of prosecution, or imprisonment in the county jail, not to exceed ninety days, or until such fine and costs are paid, or both fine and imprisonment at the discretion of the court.

Added by Act No. 12, P. A. 1905.

15. Sec. 15. Whenever it is determined by the Dairy and Food Commissioner, his deputy or inspectors, that unsanitary conditions exist or are permitted to exist in the operation of any skimming station, creamery, cheese factory, condensed milk factory, milk depot, or farm dairy, the proprietor or proprietors, or manager of said skimming station,

creamery, cheese factory, condensed milk factory or farm dairy, shall be first notified and warned by the commissioner, his deputy or inspectors to place such skimming station, creamery, cheese factory, condensed milk factory, milk depot or farm dairy in a sanitary condition, within a reasonable length of time; and any person or persons owning or operating such skimming station, creamery, cheese factory, condensed milk factory, milk depot, or farm dairy, failing to obey such notice and warning, shall be guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than twenty-five dollars nor more than three hundred dollars, and costs of prosecution, or imprisonment in the county jail, not to exceed ninety days or until such fine and costs are paid, or both fine and imprisonment at the discretion of the court.

Added by Act No. 12, P. A. 1905.

16. Sec. 16. It shall be the duty of the proprietor or proprietors of every skimming station, creamery, cheese factory, condensed milk factory, or milk depot, in the State where milk or cream is received by purchase or otherwise from three or more persons, to register with the Dairy and Food Commissioner on or before April first of each year, upon blanks furnished by said official, the location of such skimming station, creamery, cheese factory, condensed milk factory or milk depot, and the name of its owner or owners and manager. And it shall be the duty of the proprietor or proprietors of every skimming station, creamery, cheese factory, condensed milk factory or milk depot in this State, where milk or cream is received by purchase or otherwise from three or more persons, to file a report with the Dairy and Food Commissioner, said report to be made on or before April first of each year, upon blanks furnished by said official, and to show the amount of milk or cream received by said skimming station, creamery, cheese factory, condensed milk factory or milk depot during the year ending December thirty-first preceding; and said report shall show the amount of butter, cheese or condensed milk manufactured during the year, together with a list of the names and postoffice addresses of the patrons of said skimming station, creamery, cheese factory, condensed milk factory or milk depot. Every skimming station, creamery, cheese factory, condensed milk factory or milk depot, so registering and so reporting shall pay to the office of the State Dairy and Food Commissioner an annual registration fee of five dollars, to be paid at the time of such registration. The money so collected by the Dairy and Food Commissioner shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner, in addition to the annual appropriation therefor.

Added by Act No. 12, P. A. 1905.

17. Sec. 17. Any person, persons or corporation who shall sell milk or cream from a wagon or other conveyance, depot or store, or who shall sell or deliver milk or cream to a hotel, restaurant, boarding house or any public place, shall be considered a milk dealer; and every milk dealer who shall sell milk or cream from a wagon or other conveyance, depot or store, or who shall sell, or deliver milk or cream to a hotel,

restaurant, boarding house or any public place in any city, town or village of this State, must first obtain a license from the Dairy and Food Commissioner to sell such milk or cream. A license shall be required for each wagon or other conveyance, depot or store. Each dealer shall pay to the Dairy and Food Commissioner a license fee of one dollar for each license so granted, which license must be obtained on or before the first day of July of each year. The moneys received by the Dairy and Food Commissioner, in payment of such licenses, shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner in addition to the annual appropriation. All licenses shall be used only in the name of the owner of the wagon, depot or store, and shall, for the purpose of this act, be prima facie evidence of ownership. No license shall be sold, assigned, or transferred. Each license shall record the name, residence, place of business, number of wagons, depots or stores used (where more than one is employed) and the number of the license. Whoever violates any of the provisions of this section, in so far as relates to registration and the securing of licenses, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars, nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days, or both.

Added by Act No. 12, P. A. 1905.

18. Sec. 18. Any manufacturer, company, person or persons who shall sell, offer or expose for sale or for distribution, in this State, any concentrated commercial feeding stuff used for feeding live stock, shall furnish with each car, or other amounts shipped in bulk, and shall affix to every package of such feeding stuff, in a conspicuous place, on the outside thereof, a plainly printed statement, clearly and truly certifying the number of net pounds in the car or package sold or offered for sale, the name or trade-mark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis, stating the percentages it contains of crude protein, crude fibre, nitrogen-free extract and ether extract, all constituents to be determined by the methods adopted by the association of official agricultural chemists. Whenever any feeding stuff is sold at retail, in bulk or in packages belonging to the purchaser, the agent or dealer shall furnish to him a certified copy of the chemical analysis named in this section.

(a) The term concentrated commercial feeding stuffs as used in this act shall include linseed meal, cotton seed meal, pea meals, cocoanut meals, gluten meals, oil meals of all kinds, gluten feeds, maize feeds, starch feeds, mixed sugar feeds, hominy feeds, rice meals, oat feeds, corn and oat feeds, meat meals, dried blood, clover meals, mixed feeds of all kinds, slaughter house waste products; also all condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended for feeding to domestic animals: Provided, That such feeding stuffs, as defined above, shall not include hays, straws, fodders, ensilage, the whole seeds nor the un-mixed meals made directly from the entire grains of wheat, rye, barley,

oats, flax-seed, maize, buckwheat, wet brewers' grains, malt sprouts, wet or dried beet pulp when unmixed with other materials. Neither shall it include wheat, rye and buckwheat brans or middlings not mixed with other substances, but sold separately as distinct articles of commerce, nor pure grains ground together.

(b) Before any manufacturer, company, person or persons shall sell, offer or expose for sale in this State any concentrated commercial feeding stuff, he or they shall, for each and every feeding stuff bearing a distinguishing name or trade-mark, file annually, with the Dairy and Food Commissioner a certified copy of the chemical analysis and certificate referred to in this section, and shall deposit with said Dairy and Food Commissioner a sealed glass jar, or bottle, containing at least one pound of the feeding stuff to be sold or offered for sale, together with an affidavit that it is a fair sample of the article thus to be sold or offered for sale. He or they shall also pay annually into the State treasury a license fee of twenty dollars for each and every brand of feeding stuff he offers or exposes for sale in this State. Said fee is to be paid on or before April first of each year: Provided, That whenever the manufacturer or importer shall have paid this license fee, his agents shall not be required to do so. Whenever any manufacturer, importer, agent or seller of any commercial feeding stuff desires at any time to sell such material and has not paid the license fee therefor, he shall pay the license fee prescribed in this section, before making any such sale. The money collected under the provisions of this act shall be paid into the State treasury and be used to help defray the expenses of the office of the Dairy and Food Commissioner, in addition to the regular appropriation therefor.

(c) Whenever the manufacturer, importer, agent or seller of any commercial feeding stuff shall have complied with the requirements of this section, the Dairy and Food Commissioner shall issue or cause to be issued, a license, permitting the sale of said feeding stuff, which license shall terminate on April first following the date of issue.

(d) All such analyses of commercial feeding stuffs required by this act, shall be made under the direction of the Dairy and Food Commissioner, and shall be paid for out of the funds arising from the license fees provided for in this section.

(e) The Dairy and Food Commissioner shall publish, or cause to be published in bulletin form, at least annually a correct statement of all analyses made, together with any incidental information concerning same which he may deem proper.

(f) Any manufacturer, importer, company, agent, person or persons, who shall sell, offer or expose for sale, without first complying with the provisions of this act, any commercial feeding stuff, or shall attach or cause to be attached to any car, package or other quantity of said feeding stuff, an analysis stating that it contains a larger percentage of any one or more of the constituents named in this section than it really does contain shall, upon conviction thereof, be fined not less than one hundred dollars for the first offense, and not less than three hundred dollars for every subsequent offense, and the offender shall also be liable for damages sustained by the purchaser of such feeding stuff on account of such misrepresentation.

(g) The Dairy and Food Commissioner, by any duly authorized

agent, is hereby authorized to select from any package of commercial or other feeding stuff exposed or offered for sale in this State, a quantity not exceeding two pounds for a sample, such sample to be used for the purpose of an official analysis and for comparison with the certificate filed with the Dairy and Food Commissioner, and with the certificate affixed to the package on sale.

Added by Act No. 12, P. A. 1905.

19. Sec. 19. The published annual report of the Dairy and Food Commissioner which shall be made to the Governor, shall include a complete accounting of all moneys received by the Department from every source, and the amount expended by the Department.

Added by Act No. 12, P. A. 1905.

20. Sec. 20. All acts and parts of acts inconsistent with this act so far as they are inconsistent are hereby repealed.

This act is ordered to take immediate effect.

Added by Act No. 12, P. A. 1905.

AN ACT in relation to the powers and duties of the Dairy and Food Commissioner of the State of Michigan.

(Act No. 167, Public Acts, 1899.)

The People of the State of Michigan enact:

21. Section 1. That any person who shall obstruct the Dairy and Food Commissioner, or his deputy, or any of his duly appointed inspectors, by refusing to allow him entrance to any place where he is authorized to enter in the discharge of his official duty, or refuses to deliver to him a sufficient sample for the analysis of any article of food or drink sold, offered or exposed for sale, or in his possession for the purpose of sale wherever the same may be found, when the same is requested and when the value thereof is tendered, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars or more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not less than ten days or more than ninety days, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

This act is ordered to take immediate effect.

AN ACT for the prevention and suppression of foul brood among bees in the State of Michigan, and the inspection thereof, and to make an appropriation therefor, and to repeal act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being sections fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-six, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven.

(Act No. 66, Public Acts, 1901.)

The People of the State of Michigan enact:

22. Section 1. The Dairy and Food Commissioner upon receipt of a certified copy of the record of the Michigan State Beekeepers' Association, by the secretary of said association, showing that a majority of the members of said association recommended the appointment of an inspector of apiaries, shall appoint a State inspector of apiaries. Said inspector shall be responsible to the Dairy and Food Commissioner and shall comply with such rules and regulations as the Dairy and Food Commissioner shall from time to time prescribe for the carrying out of the work of said State inspector.

23. Sec. 2. The Dairy and Food Commissioner shall, when notified in writing by the owner of an apiary or by three disinterested tax payers in the vicinity of the apiary, cause the inspector to examine such apiaries as are reported and all others in the same locality not reported, and ascertain whether or not the disease known as foul brood or other contagious disease exists in such apiaries, and if satisfied of the existence of foul brood, he shall give the owner or caretaker of the diseased apiaries full instructions how to treat said case as in the inspector's judgment seems best.

24. Sec. 3. The inspector who shall be the sole judge may visit all diseased apiaries a second time and if need be burn all colonies of bees and combs that may be found not cured of foul brood or other contagious diseases.

25. Sec. 4. If the owner of a diseased apiary, honey or appliances shall knowingly or wilfully sell, barter or give away any bees, honey or appliances, or expose other bees to the danger of said disease or refuse to allow said inspector to inspect such apiary, honey or appliances, said owner shall on conviction before a justice of the peace, be liable to a fine of not less than fifty dollars nor more than one hundred dollars, or not less than one month's imprisonment in the county jail, nor more than two months' imprisonment.

26. Sec. 5. In addition to such individual reports as are required under this act by the inspector of apiaries, he shall make an annual report to the Dairy and Food Commissioner, giving the number of the apiaries visited, the number of diseased apiaries found, the number of colonies treated, also the number of colonies destroyed by fire, and an itemized account of his transportation expenses with affidavit annexed thereto.

27. Sec. 6. There is hereby appropriated out of any moneys in the

State treasury not otherwise appropriated a sum not exceeding five hundred dollars per year for the suppression of foul brood among the bees in Michigan. The inspector shall receive three dollars per day and actual transportation expenses for actual time served, which sum shall not exceed the money hereby appropriated, to be paid by the State Treasurer upon warrants drawn by the Auditor General and approved by the Dairy and Food Commissioner.

28. Sec. 7. Act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being section fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-six, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven is hereby repealed.

This act is ordered to take immediate effect.

GENERAL FOOD LAW.

AN ACT to prohibit and prevent adulteration, fraud and deception in the manufacture, and sale of articles of food and drink.

(Act No. 193, Public Acts, 1895.)

The People of the State of Michigan enact:

29. (C. L., 5010) Section 1. That no person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food which is adulterated within the meaning of this act.

Am. by Act No. 118, P. A. 1897.

30. (C. L., 5011) Sec. 2. The term food, as used herein, shall include all articles used for food or drink, or intended to be eaten or drank by man, whether simple, mixed or compound.

31. (C. L., 5012) Sec. 3. An article shall be deemed to be adulterated within the meaning of this act: *First*, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; *Second*, If any inferior or cheaper substance or substances have been substituted wholly or in part for it; *Third*, If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; *Fourth*, If it is an imitation of, or is sold under the name of another article; *Fifth*, If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal; *Sixth*, If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; *Seventh*, If it contains any added substance or ingredient which is poisonous or injurious to health;

Provided, That nothing in this act shall prevent the coloring of pure butter: *And provided further*, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definition fourth and seventh of this section.

Am. by Act No. 118, P. A. 1897.

32. (C. L., 5013) Sec. 4. No person, by himself or his agents or servants, shall manufacture for sale or offer or expose for sale, or sell, as butter, and the legitimate product of the dairy or creamery, any article not made exclusively of milk or cream, but into which the oil or fat of animals, or any other oils not produced from milk, enters as a component part, has been introduced to take the place of cream. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail, or the State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

33. (C. L., 5014) Sec. 5. No person shall manufacture, deal in, sell, offer or expose for sale or exchange, any article or substance in the semblance of, or in imitation of cheese made exclusively of unadulterated milk or cream, or both, into which any animal, intestinal or offal fats or oils or melted butter in any condition or state or modification of the same, or oleaginous substances of any kind not produced from unadulterated milk or cream shall have been introduced. Whoever shall violate the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars and the costs of prosecution, or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

34. (C. L., 5015) Sec. 6. Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "Full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. It shall be the duty of the proprietor of every cheese factory, creamery or butter factory in the State where milk or cream is purchased of or contributed by three or more persons, to register the location of such cheese factory, creamery or butter factory, and the name of its owner or manager with the Dairy and Food Commissioner on or before the first day of October, A. D. eighteen hundred ninety-seven, and on or before the first day of April in each year thereafter. Whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars nor more than twenty-five

dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days or both.

Am. by Act No. 118, P. A. 1897.

35. (C. L., 5016) Sec. 7. The Dairy and Food Commissioner shall procure and issue to the cheese manufacturers of the State, on proper application, which application shall be made on or before the first day of October, A. D. eighteen hundred ninety-five and on or before the first day of April in each year thereafter, and under such regulation as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto and the words "Michigan full cream cheese." Every such brand shall be used on the outside of the cheese, and upon the package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall be registered the name, location and number of each manufactory using the brand and the name or names of persons at each factory authorized to use the same. No such brand shall be used on other than full cream cheese or packages containing the same. The commissioner shall receive a fee of one dollar for each registration, said fee to be paid by the party applying for the same, which amount shall be accounted for and used as a part of the fund appropriated for the enforcement of the laws of this State with which the Dairy and Food Commissioner is charged.

36. (C. L., 5017) Sec. 8. No person shall knowingly offer, sell or expose for sale, in any package cheese which is falsely branded or labeled.

37. (C. L., 5018) Sec. 9. No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell as lard, any substance not the legitimate and exclusive product of the fat of the hog.

38. (C. L., 5019) Sec. 10. Every person who manufactures for sale, has in his possession with intent to sell, offers or exposes for sale, or sells, any substance made in the semblance of lard, or as an imitation of lard, and which consists of any mixture or compound of animal or vegetable oils, or fats, other than hog fat, in the form of lard, shall cause the tierce, barrel, tub, pail or package containing the same to be distinctly and legibly branded or labeled "Lard substitute or compound," and every person who manufactures for sale, has in his possession with intent to sell, offers or exposes for sale or sells, any substance made in the semblance of lard or as an imitation of lard, or as a substitute for lard, and which is designed to take the place of lard, and which consists of any mixture or compound of lard with animal or vegetable oils or fats shall cause the tierce, barrel, tub, pail or package containing the same to be distinctly and legibly branded or labeled either "Adulterated lard," "Lard compound," or "Lard substitute." Such brands or labels shall be in letters not less than one inch in length and shall be followed with the name of the maker and factory, and the location of such factory.

39. (C. L., 5020) Sec. 11. Every dealer or trader who, by himself or agent, or as the servant or agent of another person, offers or exposes for sale, or sells any form of lard substitute or adulterated lard, as

hereinbefore defined, shall securely affix or cause to be affixed to the package wherein the same is contained, offered for sale or sold, a label, upon the outside and face of which is distinctly and legibly printed in letters not less than one-half inch in length, the words "Lard substitute" or "Adulterated lard" or "Lard compound" or other appropriate word which shall correctly express its nature and use.

40. (C. L., 5021) Sec. 12. The having in possession of any lard substitute or adulterated lard or lard compound, as hereinbefore defined, which is not branded or labeled as hereinbefore required and directed, upon the part of any dealer or trader, or any person engaged in the public sale of such articles, shall for the purpose of the act be deemed *prima facie* evidence of intent to sell the same.

41. (C. L., 5022) Sec. 13. No person, firm or corporation in this State shall manufacture for sale, or sell, or offer or expose for sale, as fruit jelly or fruit butter, any jelly or imitation fruit butter or other similar compound made or composed in whole or in part of glucose, dextrine, starch or other substances, and colored in imitation of fruit jelly or fruit butter; nor shall any such jelly, fruit butter or compound be manufactured or sold, or offered for sale, under any name or designation whatever, unless the same shall be composed entirely of ingredients not injurious to health, and shall not be colored in imitation of fruit jelly, and every can, pail or package of such jelly or butter sold in this State, shall be distinctly and durably labeled "Imitation fruit jelly or butter," with the name of the manufacturer and the place where made. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and when convicted thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment in the discretion of the court.

42. (C. L., 5023) Sec. 14. No packer or dealer in preserved or canned fruits and vegetables, or other articles of food, shall sell or offer for sale such canned articles, unless such articles shall be entirely free from substances or ingredients deleterious to health, and unless such articles bear a mark, stamp, brand or label bearing the name and address of the firm, person or corporation that packs the same. All "Soaked or bleached goods," or goods put up from products dried before canning, shall be plainly marked, branded, stamped or labeled as such, with the words "Soaked or bleached goods," in letters not less than two-line pica in size, showing the name of the article and the name and address of the packer.

43. (C. L., 5024) Sec. 15. No person shall manufacture or sell, or offer for sale any manufactured or artificial coffee berry in imitation of the genuine berry. No person shall manufacture, sell or offer or expose for sale any ground or prepared coffee, which is adulterated with chicory or other substance not injurious to health, unless each package thereof shall be distinctly labeled or marked "Coffee compound," together with the name and address of the manufacturer or compounder thereof, and has no other label of whatever name or designation. No person shall offer or expose for sale, have in his possession with intent to sell, or sell any molasses, syrup or glucose, unless the barrel, cask,

keg, can or pail containing the same shall be distinctly branded or labeled with the true and appropriate name; nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any molasses or syrup mixed with glucose, unless the barrel, cask, keg or pail containing the same be distinctly branded or labeled "Glucose mixture," and the per cent in which glucose enters into its composition. Such barrel, cask, keg or pail shall be branded or labeled in a conspicuous place; and such brands or labels shall be in letters of not less than one-half inch in length. Glucose and glucose mixtures shall have no other designation than herein required.

Am. by Act No. 118, P. A. 1897.

44. (C. L., 5025) Sec. 16. No person shall within this State manufacture, brew, distil, have or offer for sale, or sell, any spirituous or fermented or malt liquors, containing any substance or ingredient not normal or healthful, to exist in spirituous, fermented or malt liquors, or which may be deleterious or detrimental to health when such liquors are used as a beverage.

45. (C. L., 5026) Sec. 17. The taking of orders or the making of agreements or contracts, by any person, firm or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of this act, shall be deemed a sale within the meaning of this act.

46. (C. L., 5027) Sec. 18. Whoever shall falsely brand, mark, stencil or label any article or product required by this act to be branded, marked, stenciled, or labeled, or shall remove, alter, deface, mutilate, obliterate, imitate or counterfeit any brand, mark, stencil or label so required, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred nor more than one thousand dollars and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

47. (C. L., 5028) Sec. 19. Whoever shall do any of the acts or things prohibited, or wilfully neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of its provisions, shall be deemed guilty of a misdemeanor, and where no specific penalty is prescribed by this act shall be punished by a fine of not less than twenty-five nor more than five hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both such fine and imprisonment, in the discretion of the court.

Am. by Act No. 117, P. A. 1899.

48. (C. L., 5029) Sec. 20. It shall be the duty of the Dairy and Food Commissioner of the State to investigate all complaints of violations of this act, and take all steps necessary to its enforcement. It shall be the duty of all prosecuting officers of this State to prosecute to completion all suits brought under the provisions of this act upon the complaint of the commissioner or of any citizen. It shall be the

duty of all food inspectors in cities to examine all complaints made to them of violation of this act, and to render assistance in enforcing its provisions. It shall also be the duty of all health boards in cities and health officers in townships to take cognizance of and report or prosecute all violations of this act that may be brought to their notice, or they may have cognizance of, within their jurisdiction.

49. Sec. 21. All acts and parts of acts inconsistent with this act are hereby repealed.

BUCKWHEAT FLOUR.

AN ACT in relation to the manufacture and sale of buckwheat flour.

(Act No. 208, Public Acts, 1903.)

The People of the State of Michigan enact:

50. Section 1. Within this State no person shall manufacture, offer or expose for sale, keep in possession with intent to sell, or sell any ground buckwheat containing any product of wheat, corn, rice or other foreign substance, unless each and every package thereof be distinctly and legibly branded or labeled "Buckwheat Flour Compound" in letters not less than one-half inch in length and be followed with the name of the maker and factory and the location of such factory.

51. Sec. 2. Any brand or label herein required shall be an inseparable part of the general or distinguishing label, and such label shall be that principal and conspicuous sign under which it is sold, and any other label or printed matter upon the package shall not be in contravention of the requirements of this act.

52. Sec. 3. The having in possession of any buckwheat flour compound, which is not branded or labeled as hereinbefore required and directed upon the part of any person engaged in the public or private sale of such article, shall, for the purpose of this act, be deemed prima facie evidence of intent to sell the same.

53. Sec. 4. The taking of orders or the making of agreements or contract by any person, firm or corporation or by any agent or representative thereof, for the future delivery of buckwheat flour compound shall be deemed a sale within the meaning of this act.

54. Sec. 5. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

55. Sec. 6. Act number eighty-four of the public acts of eighteen hundred ninety-seven, entitled "An act to prohibit and prevent adul-

teration, fraud and deception in the manufacture and sale of buckwheat flour," being sections four thousand nine hundred ninety-four to five thousand two, both inclusive, of the Compiled Laws of one thousand eight hundred ninety-seven is hereby repealed.

VINEGAR.

AN ACT in relation to the manufacture and sale of vinegar, and to repeal act number two hundred and twenty-four of the public acts of eighteen hundred and eighty-nine, approved July one, eighteen hundred and eighty-nine.


(Act No. 71, Public Acts, 1897.)

The People of the State of Michigan enact:

56. (C. L., 5003) Section 1. That no person shall manufacture for sale, offer or expose for sale, sell or deliver, or have in his possession with intent to sell, or deliver, any vinegar not in compliance with the provisions of this act. No vinegar shall be sold as apple, orchard or cider vinegar, which is not the legitimate product of pure apple juice, known as apple cider or vinegar, not made exclusively of said apple cider or vinegar into which foreign substance, drugs or acids have been introduced, as may appear upon proper test, and upon said test, shall contain not less than one and three-fourths per cent, by weight, of cider vinegar solids upon full evaporation at the temperature of boiling water.

57. (C. L., 5004) Sec. 2. All vinegar made by fermentation and oxidation without the intervention of distillation shall be branded "fermented vinegar," with the name of the fruit or substance from which the same is made. And all vinegar made wholly or in part from distilled liquor shall be branded "distilled vinegar," and all of such distilled vinegar shall be free from coloring matter added during or after distillation and from color other than that imparted to it by distillation. And all fermented vinegar not distilled shall contain not less than one and three-fourths per cent, by weight, upon full evaporation (at the temperature of boiling water) of solids, contained in the fruit or grain from which said vinegar is fermented, and said vinegar shall contain not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. And all vinegar shall be made wholly from the fruit or grain from which it purports to be or is represented to be made, and shall contain no foreign substance, and shall contain not less than four per cent, by weight, of absolute acetic acid.

58. (C. L., 5005) Sec. 3. No person shall manufacture for sale, offer for sale, or have in his possession with intent to sell, any vinegar found upon proper test to contain any preparation of lead, copper, sulphuric or other mineral acid, or other ingredients injurious to health.



And all packages containing vinegar shall be marked, stenciled or branded on the head of the cask, barrel or keg containing such vinegar with the name and residence of the manufacturer together with brand required in section two hereof.

59. (C. L., 5006) Sec. 4. Whoever violates any of the provisions of this act shall, upon conviction, be fined not less than fifty dollars nor more than one hundred dollars, or imprisonment in the county jail not to exceed ninety days and the costs of prosecution, or by both such fine and imprisonment in the discretion of the court.

60. Sec. 5. All acts and parts of acts contravening the provisions of this act are hereby repealed.

MILK.

AN ACT to prevent and punish offenders for the adulteration of milk, and the products made therefrom, and to repeal an act, entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one.

(Act No. 26, Public Acts, 1873.)

The People of the State of Michigan enact:

61. (C. L., 11411) Section 1. That whoever shall knowingly sell to any person or persons, or sell, deliver, or bring to be manufactured to any cheese or butter manufactory in this State, any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of the milk known as "strippings," with intent to defraud, or shall knowingly sell milk, the product of a sick or diseased animal or animals, or any milk produced from any cow fed upon the refuse of a distillery, or of a brewery, or upon any substance deleterious to the quality of the milk, or shall knowingly use any poisonous or any deleterious material in the manufacture of any cheese or butter, or shall knowingly sell or offer to sell any cheese or butter in the manufacture of which any poisonous or deleterious substance has been used, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than ten dollars nor more than one hundred dollars; and may be committed to the county jail until such fine shall be paid: Provided, that such imprisonment shall not exceed ninety days; and shall be liable in double the amount of damages to the person or persons, firm, association, or corporation upon which such fraud shall have been committed. An act, entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one, is hereby repealed: Provided, That any right accrued or forfeiture incurred under said act, shall remain valid and binding, and may be enforced under said act as if the same were not repealed.

AN ACT to prevent the sale of impure, unwholesome, adulterated, or swill milk in the State of Michigan, and to provide for inspectors.

(Act No. 246, Public Acts, 1887.)

The People of the State of Michigan enact:

62. (C. L., 11412) Section 1. That it shall be unlawful for any person, either by himself or agent, to sell, or expose for sale within the State of Michigan any unwholesome, watered, or adulterated or impure milk or swill milk or colostrum, or milk from cows kept upon garbage, swill or any substance in a state of fermentation or putrefaction or other deleterious substances, or from cows kept in connection with any family in which there are infectious diseases. The addition of water or ice to the milk is hereby declared an adulteration.

Am. by Act No. 219, P. A. 1889.

63. (C. L., 11413) Sec. 2. Any person who shall violate any of the provisions of the preceding section shall be punished by a fine not to exceed one hundred dollars or (by) imprisonment not to exceed three months or by both such fine and imprisonment, in the discretion of the court.

64. (C. L., 11414) Sec. 3. It shall be the duty of the metropolitan police commissioners of the city of Detroit, by and with the consent and advice of the board of health of the city of Detroit, to appoint an inspector, who shall be a person of previous practical experience. Said inspector may be created captain, sergeant or roundsman of the said police force of the city of Detroit, at the option of the board of metropolitan police commissioners.

65. (C. L., 11415) Sec. 4. It shall be the duty of said inspector to personally view, so far as possible, all milk exposed for sale in said city, and to visit all dairy houses, barns, or stables in said city or the county of Wayne, to inspect the same, and the animals held therein, and to visit all places where milk is kept or exposed for sale in the city of Detroit, and to inspect and ascertain the condition of said milk. He may detail any patrolman of said city to assist him in the performance of any or all of the duties enjoined on him by this act: Provided, always, That said inspector and any policeman so detailed shall always be subject to the provisions of the law establishing and governing the metropolitan police of said city.

66. (C. L., 11416) Sec. 5. It shall be the duty of said inspector or of his assistant, and of all other inspectors appointed under this act, to make complaint in writing before a police justice or justice of the peace, or other court having jurisdiction thereof, of every violation of this act coming to his knowledge.

Am. by Act No. 219, P. A. 1889.

67. (C. L., 11417) Sec. 6. Each and every quantity of milk sold or exposed for sale contrary to the provisions of this act, shall constitute a separate offense.

68. (C. L., 11418) Sec. 7. Any person who shall refuse to permit the said inspector, or his assistant (assistants), to perform his duty under this act, either by refusing him entrance to his premises or by concealing any milk, or refusing to permit any milk or animal or premises wherein animals are kept, to be viewed and inspected as herein provided, or by in any manner hindering or resisting any said inspector or assistant inspector in the performance of his duty, shall be guilty of a misdemeanor and punished therefor.

69. (C. L., 11419) Sec. 8. Authority is hereby given the common council of any city, and the board of trustees or council of any village, to appoint an inspector of milk in any such city or village, and to fix their compensation, and when appointed the said inspectors of milk shall have all the powers given by section four of this act, and shall perform all the duties required of inspectors of milk as provided herein, and such other powers and duties as may be conferred or imposed by the ordinances of said cities or villages.

70. (C. L., 11420) Sec. 9. Whoever shall adulterate by himself, or by his servant or agent, or sell, exchange or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale or exchange, adulterated milk or milk to which water or any foreign (substance) substances in any state of fermentation or putrefaction, or from sick or diseased cows, shall be guilty of a misdemeanor, and shall, for every such offense, be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia not exceeding three months.

Added by Act No. 219, P. A. 1889.

71. (C. L., 11421) Sec. 10. Whoever shall adulterate, himself, or by his servant or agent, sell, exchange or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale as pure milk, any skimmed milk from which the cream or any part thereof has been removed shall be guilty of a misdemeanor, and shall, for such offense, be punished by the penalty provided in the preceding section.

Added by Act No. 219, P. A. 1889.

72. (C. L., 11422) Sec. 11. Any dealer in milk who shall by himself, servant or agent, sell, exchange or deliver, or have in his custody or possession with intent to sell, exchange or deliver the same, milk from which the cream or any part thereof has been removed, unless in a conspicuous place above the center upon the outside of every vessel, can or package from which any such milk is sold, the words "Skimmed milk" are distinctly painted in letters not less than one inch in length, shall be guilty of a misdemeanor and shall be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or Detroit House of Correction not exceeding three months.

Added by Act No. 219, P. A. 1889.

73. (C. L., 11423) Sec. 12. If milk sold or offered for sale under the provisions of this act as pure milk is shown upon analysis by weight

to contain more than eighty-seven and fifty one-hundredths per centum of watery fluid, or to contain less than twelve and fifty one-hundredths of milk solids, per centum, or less fat than three per centum, or if the specific gravity at 60 degrees Fahrenheit is not between 1.29-1.000 to 1.33-1.000, it shall be deemed to be adulterated. If milk sold or offered for sale under the provisions of this act as skimmed milk has a specific gravity at 60 degrees Fahrenheit less than 1.032, and greater than 1.037 it shall be deemed to be adulterated.

Added by Act No. 219, P. A. 1889.

74. (C. L., 11424) Sec. 13. Whenever any inspector of milk has reason to believe that any milk found by him is adulterated, he shall take specimens thereof and test the same with such instrument or instruments as are used for such purposes, and he shall make an analysis thereof, showing total solids, the percentage of butter, the percentage of water and the percentage of ash; and if the result of such test and analysis indicates that the milk has been adulterated or deprived of its cream or any part thereof, the same shall be prima facie evidence of such adulteration in a prosecution under this act.

Added by Act No. 219, P. A. 1889.

75. (C. L., 11425) Sec. 14. Any person who shall remove the cream or any part thereof from milk to be sold as pure milk to any manufactory in which milk is used as a material in the process of production, and any person who shall, in any manner, adulterate such milk, either by the addition of water or otherwise, shall be guilty of a misdemeanor, and shall, for every such offense, be punished by a fine not exceeding one hundred dollars, or by imprisonment in the county jail or Detroit House of Correction not exceeding ninety days.

Added by Act No. 219, P. A. 1889.

AN ACT in relation to the sale and delivery of milk.

(Act No. 106, Public Acts, 1899.)

The People of the State of Michigan enact:

76. Section 1. No person shall offer or expose for sale, sell, exchange or deliver, or have in his possession with intent to sell, exchange or deliver, any milk to which water, chemicals or preservatives, or any other foreign substance has been added. The term milk as used in this act shall include all skimmed milk, butter milk, cream and milk in its natural state as drawn from the cow.

77. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than one

dollar nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment, in the discretion of the court.

This act is ordered to take immediate effect.

OLEOMARGARINE.

AN ACT in relation to the manufacture and sale of oleomargarine or imitation butter.

(Act No. 147, Public Acts, 1899.)

The People of the State of Michigan enact:

78. Section 1. No person shall sell, expose or offer for sale or exchange, or have in his possession with intent to sell or exchange, any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless each and every vessel, package, roll or parcel of such substance has distinctly and durably printed, stamped or stenciled thereon in black letters the true name of such substance, in ordinary bold faced capital letters, not less than five line pica in size; and also the name and address of the manufacturer, together with the name of each and every article or ingredient used or entering into the composition of such substance, in ordinary bold faced letters, not less than pica in size.

79. Sec. 2. No person shall sell, exchange or deliver any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless he shall distinctly inform the purchaser by a verbal notice at the time of the sale that the same is a substitute for butter, and shall also deliver to the purchaser of each and every roll, package or parcel of such oleomargarine or other substance, at the time of the delivery of the same, a separate and distinct label, on which is plainly and legibly printed in black ink in ordinary bold faced capital letters not less than five line pica in size, the true name of such substance and also the name and address of the manufacturer, together with the name of each article used and entering into the composition of such substance, in ordinary bold faced letters not less than pica in size.

80. Sec. 3. The proprietor or keeper of any store, hotel, restaurant, eating saloon, boarding house, or other place where oleomargarine is sold or furnished to persons paying for the same, shall have placed on the walls of every store or room where oleomargarine is sold or furnished, a white placard on which is printed in black ink, in plain Roman letters of not less than three inches in length, and not less than two inches in width, the words "Oleomargarine Sold or Used Here," and shall at all times keep the same exposed in such conspicuous place as to be readily seen by any and all persons entering such store, or other room or rooms.

81. Sec. 4. No person shall use in any way, in connection or association with the sale or exposure for sale or advertisement of any substance designed to be used as a substitute for butter, the word "butter," "creamery," or "dairy," or the name or representation of any breed of dairy cattle, or any combination of such word or words and representation, or any other words or symbols or combinations thereof commonly used in the sale of butter.

82. Sec. 5. For the purpose of this act the word "butter" shall be understood to mean the food product usually known as butter, and which is made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter.

83. Sec. 6. For the purpose of this act certain manufactured substances, certain extracts, and certain mixtures and compounds, including such mixtures and compounds with butter, shall be known and designated as "oleomargarine," namely: "All substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, intestinal fat, and offal fat, made in imitation or semblance of butter, or when so made, calculated or intended to be sold or used as butter or for butter.

84. Sec. 7. Whoever violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, in each and every offense. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

This act is ordered to take immediate effect.

AN ACT to prevent deception in the manufacture and sale of imitation butter.

(Act No. 22, Public Acts, 1901.)

The People of the State of Michigan enact:

85. Section 1. No person, by himself or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream

from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

86. Sec. 2. Whoever violates any of the provisions of section one of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

RENOVATED BUTTER.

AN ACT in relation to the manufacture and sale of renovated butter.

(Act No. 243, Public Acts, 1903.)

The People of the State of Michigan enact:

87. Section 1. No person, firm or corporation shall manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession with the intent to sell, exchange or deliver, any butter that is produced by taking original packing stock butter or other butter, or both, melting the same so that the butterfat can be drawn off or extracted, mixing the said butterfat with skimmed milk, or milk or cream, or other milk product, and rechurning or reworking the said mixture; nor shall any person, firm or corporation manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession for any such purpose any butter which has been subjected to any process by which it is melted, clarified or refined, and made to resemble butter, and is commonly known as boiled, process or renovated butter, and which for the purpose of this act is hereby designated as "Renovated Butter," unless the same shall be branded or marked as provided in section two of this act.

88. Sec. 2. Whoever, himself or by his agent, or as the servant or agent of another person shall sell, expose for sale or have in his custody or possession with the intent to sell any "Renovated Butter," as defined in section one of this act, shall have the words "Renovated Butter" conspicuously stamped, labeled or marked in one or two, lines and in plain gothic letters, at least three-eighths of an inch square, so that the words cannot be easily defaced, upon two sides of each and every tub, firkin, box or package containing said "Renovated Butter," or, if such butter is exposed for sale uncovered, or not in a case or package, a placard containing said words in the same form as above described in

this section shall be attached to the mass in such a manner as to be easily seen and read by the purchaser. When "Renovated Butter" is sold from such package or otherwise at retail, in print, roll or other form, before being delivered to the purchaser, it shall be wrapped in wrappers plainly stamped on the outside thereof with the words "Renovated Butter" printed or stamped thereon in one or two lines, and in plain gothic letters at least three-eighths of an inch square, and such wrapper shall contain no other words or printing thereon, and said words "Renovated Butter" so stamped or printed on the said wrapper shall not be in any manner concealed, but shall be in plain view of the purchaser at the time of the purchase.

89. Sec. 3. Whoever shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or Michigan Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

90. Sec. 4. Act number two hundred fifty-four of the public acts of eighteen hundred ninety-nine, entitled "An act to regulate the sale of butter produced by taking original packing stock and other butter and melting the same so that the butter oil can be drawn off, mixed with skimmed milk or other material, and by emulsion or other process produce butter, and butter produced by any similar process and commonly known as 'process' butter; providing for the enforcement thereof, and punishment for the violation of the same," is hereby repealed.

CANDY.

AN ACT to prevent the adulteration of candies and confectioneries and the sale thereof, when so adulterated as to be injurious to the public health.

(Act No. 11, Public Acts, 1887.)

The People of the State of Michigan enact:

91. (C. L., 11409) Section 1. That any person or persons manufacturing for sale or knowingly selling or offering to sell any candies or confectioneries adulterated by the admixture of terra alba, barytes, talc or other earthy or mineral substances, or any poisonous colors, flavors or extracts, or other deleterious ingredients detrimental to health, shall upon proper conviction thereof, before a court of competent jurisdiction, be punished by a fine not less than ten nor more than one hundred dollars, or imprisonment in the county jail not less than ten nor more than thirty days, or both such fine and imprisonment in the discretion of the court.

92. (C. L., 11410) Sec. 2. It is hereby made the duty of the local

health officer or local board of health having jurisdiction thereof to investigate without unnecessary delay all complaints that may be properly brought before them and containing the facts as supported by affidavit of the parties complaining of the adulteration or sale of adulterated candies or confectioneries, and if after investigation by such officer or board reasonable cause for action is found to exist, then such officer or board shall at once give notice to the prosecuting attorney of the county in which such complaint is made, and make or cause to be made, before a proper officer, a formal complaint in writing and duly verified, and thereupon said prosecuting attorney shall immediately commence proceedings against the person or persons so offending.

LIQUORS.

AN ACT for the regulation of, manufacture and sale of spirituous and intoxicating liquors.

(Extract from Act No. 313, Public Acts, 1887.)

93. (C. L., 5403) Sec. 25. If any person shall adulterate any spirituous, or alcoholic liquors used or intended to drink, by mixing the same in the manufacture or preparation thereof, or by process of rectifying, or otherwise, with any deleterious drug, substance or liquid, which is poisonous or injurious to health, except as hereinafter provided, or if any person shall sell, or offer to sell, any wine, or spirituous, or alcoholic liquors, or shall import into this State, any wine, or spirituous, or intoxicating liquors and sell, or offer for sale such liquors, knowing the same to be adulterated, or shall sell, or offer to sell, any spirituous or intoxicating liquors from any barrel, cask or other vessel containing the same, and not branded as hereinafter provided, he shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine not exceeding five hundred dollars, nor less than fifty dollars, and shall be imprisoned in the jail of the county not more than six months, nor less than ten days.

94. (C. L., 5404) Sec. 26. It shall be the duty of every person or persons, engaged in the manufacture and sale of malt, spirituous, or alcoholic liquors, or in rectifying or preparing the same in any way, to brand on each barrel, cask, or other vessel containing the same, the name or names of the person, company, or firm manufacturing, rectifying or preparing the same, and also these words, "Pure and without drugs or poison."

95. (C. L., 5405) Sec. 27. No person shall sell at wholesale or retail, any ale, rum, wine or other malt or spirituous liquors from any barrel, cask, or vessel, unless the same shall have been branded and marked as aforesaid.

96. (C. L., 5406) Sec. 28. If any barrel, cask or other vessel containing any drugged or poisoned liquor shall be found in the possession of any wholesale or retail dealer in liquors, or in the possession of any

person holding himself out as such a dealer, it shall be deemed prima facie evidence of the violation of the provisions of this act.

97. (C. L., 5407) Sec. 29. Any person who shall put into any barrel, cask, or other vessel, branded or marked as required by this act, any liquors drugged or adulterated as aforesaid, or who shall sell or offer for sale any such liquors, for the purpose and with the intent of deceiving any person in the sale thereof, or shall violate any of the provisions of section twenty-six, twenty-seven, or twenty-eight, of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished as provided in section twenty-five of this act.

98. (C. L., 5408) Sec. 30. The provisions of this act shall not be so construed as to prevent druggists, physicians, and persons engaged in the mechanical arts from compounding liquors for medicinal and mechanical purposes.

PEPPER.

AN ACT to provide for the manufacture and sale of black pepper in this State and to provide a penalty for the violation of the provisions of this act.

(Act No. 180, Public Acts, 1901.)

The People of the State of Michigan enact:

99. Section 1. Within this State no person, firm or corporation shall manufacture, offer or expose for sale, keep in possession with intent to sell, or sell any ground or whole black pepper containing any foreign substance whatever. All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

100. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than five hundred dollars and the costs of the prosecution, or by imprisonment in the county jail not more than ninety days, or both such fine and imprisonment in the discretion of the court.

AN ACT to prohibit the adulteration of maple sugar, maple molasses and maple syrup.

(Act No. 170, Public Acts, 1893.)

The People of the State of Michigan enact:

(5007) Section 1. That it shall be unlawful for any person, dealer, firm, manufacturer or corporation to manufacture and sell, or offer for sale, any maple sugar, maple molasses or maple syrup, that is in anywise adulterated with common sugar, beet sugar, glucose or any other foreign substance without distinctly marking, stamping or labeling the article or the package containing the same with the true and appropriate name of such article and the percentage in which common sugar, beet sugar, glucose or any other foreign substance enters into the composition of the same.

(5008) Sec. 2. Any person, dealer, firm, manufacturer or corporation, who shall sell or offer for sale, and who shall falsely stamp or misrepresent or label any cans, jugs, jars or packages containing maple molasses or maple syrup, and any person, dealer, firm, manufacturer or corporation who shall sell or offer for sale any maple sugar that is in anywise adulterated, who falsely misrepresents or labels or stamps the same, or knowingly permits such misrepresentation or false stamping or labeling, shall be deemed guilty of a misdemeanor and punished with a fine not less than fifty dollars, in case of vender, and in the case of manufacturers and those falsely or fraudulently stamping or labeling or misrepresenting such goods, shall be fined not less than five hundred dollars, nor more than one thousand dollars, and it shall be the duty of any board of health in this State, or food commissioner, should there be one, cognizant of any violation of this act to prosecute any person, dealer, firm, manufacturer, or corporation, which it has reason to believe has violated any of the provisions of this act, and after deducting the costs of trial and conviction the balance of fine recovered, one-half be placed in the township treasury wherein the conviction is made, the balance placed to the general fund of the county. Any (person) persons, dealer, firm, manufacturer or corporation who shall knowingly sell or offer for sale any cans, jugs, jars, or packages containing maple molasses, maple syrup, or maple sugar, that is in anywise adulterated, shall be deemed guilty of a misdemeanor and punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail for a period not to exceed three months, or by both such fine and imprisonment, at the discretion of the court.

(5009) Sec. 3. Any person, dealer, firm, manufacturer, or corporation, who shall falsely stamp or misrepresent or label any cans, jugs, jars, or packages, containing maple molasses, or maple syrup, or maple sugar, that is in anywise adulterated, or knowingly permits such (misrepresentation) misrepresentations or false stamping or labeling, shall be deemed guilty of a misdemeanor, and punished by a fine, not more than five hundred dollars, or by imprisonment in the county jail for a period of not more than one year, or by both such fine or imprisonment, in the discretion of the court.

CORN SYRUP.

AN ACT in relation to the sale of corn syrup.

(Act No. 123, Public Acts, 1903.)

The People of the State of Michigan enact:

101. Section 1. No person shall offer or expose for sale, have in his possession with intent to sell, or sell, any cane syrup, beet syrup, or glucose, unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled with the true and appropriate name; nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any cane syrup or beet syrup mixed with glucose unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled "Glucose Mixture" or "Corn Syrup" in plain gothic type not less than three-eighths of an inch square, with the name and percentage, by weight, of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain gothic letters not less than one-quarter of an inch square. Each and every package of syrup either simple or mixed shall bear the name and address of the manufacturer. Such mixtures or syrups shall have no other designation or brand than herein required that represents or is the name of any article which contains a saccharine substance; and all brands or labels required shall be an inseparable part of the general or distinguishing label, and that the general or distinguishing label shall be that principal and conspicuous sign under which it is sold.

102. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

PRESERVATIVES.

AN ACT in relation to the use of preservatives in food products.

(Act No. 7, Public Acts, 1905.)

The People of the State of Michigan enact:

103. Section 1. No person, firm or corporation shall manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any food product containing benzoic acid or benzoate of sodium,

or any other harmless preservative, unless each and every package containing the same shall, in the condition in which it is exposed for sale, be distinctly, conspicuously, and legibly branded, labeled, or marked, in plain English letters, with the words, "Prepared with" followed by the proper English name of the preservative used: Provided, That nothing in this act shall be construed to prohibit or regulate, by branding or otherwise, the use as a preservative of common salt, syrup, sugar, salt petre, spices, alcohol, vinegar or wood smoke: And provided further, That the provisions of this act shall not apply to dairy products.

104. Sec. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act, or in any way violate any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than ten dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

MICHIGAN SUPREME COURT.

DECISIONS RELATIVE TO DAIRY AND FOOD LAWS.

PEOPLE v. SNOWBERGER.

(Opinion filed May 25, 1897.)

Adulteration of Food—Statutory Offenses—Intent—Police Power.

1. It is competent for the legislature under the police power, to provide for the protection of the public health by making it an offense punishable by fine and imprisonment to sell adulterated food or drink, irrespective of the seller's knowledge of the adulteration.
2. Act No. 193, Public Acts, 1895, prohibits the manufacture or sale of adulterated articles of food or drink, and prescribes what shall be deemed adulteration within the meaning of the act. Section 8 forbids any person from *knowingly* offering for sale cheese which is falsely labeled; this being the only case in which knowledge is expressly made an element of an offense designated by such statute. *Held*, that proof of guilty knowledge or intent is not essential to the conviction of one who sells adulterated food.

(113 Mich. 86.)

Exceptions before judgment from Monroe; Kinne, J.

Michael Snowberger was convicted of selling adulterated food, in violation of act No. 193, Public Acts of 1895.

Conviction affirmed.

William Look and Ira G. Humphrey, for appellant.

Bowen, Douglas & Whiting, of counsel.

Willis Baldwin, Prosecuting Attorney, for the people.

Long, C. J.: Respondent was convicted under an information charging that: "On the 19th day of April, A. D. 1897, at the city of Monroe, and in the county aforesaid, Michael Snowberger did offer for sale, and

sell, to Carl Franke, an adulterated article of food, to-wit: A quantity of mustard, to-wit, a quarter of a pound, colored and adulterated with turmeric, whereby the said mustard, as an article of food, was damaged and its inferiority concealed and whereby it was made to appear of better and of greater value than it really was, the same not being a mixture or compound recognized as ordinary articles or ingredients of articles of food; contrary to the form of the statute in such case made and provided," etc.

The information was filed under act No. 193, Public Acts 1895, entitled "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink." The act provides:

Section 1. "No person shall within this State manufacture for sale, offer for sale, or sell any article of food which is adulterated within the meaning of this act."

Section 2. "The term food as used herein, shall include all articles used for food or drink, or intended to be eaten or drunk by man, whether simple, mixed or compound."

Section 3. "An article shall be deemed to be adulterated within the meaning of this act: One, If any substance or substances have been mixed with it so as to lower or deprecate or injuriously affect its quality, strength or purity; Two, If any inferior or cheaper substance or substances have been substituted wholly or in part for it; Three, If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; Four, If it is sold under the name of another article; Five, If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or in case of milk, if it is the product of a diseased animal; Six, If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; Seven, If it contains an added substance or ingredient which is poisonous or injurious to health: *Provided*, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale be distinctly labeled as mixtures or compounds, and are not injurious to health."

Section 19 makes any violation of the act a misdemeanor and provides a penalty by a fine of not less than \$100 nor more than \$500, or by imprisonment in the county jail, etc.

On the trial respondent admitted, that on the 19th day of April, 1897, he, at the city of Monroe, this State, offered for sale and did sell to Carl Franke a quantity of mustard, to-wit, a quarter of a pound, which was afterwards found upon a chemical examination to be colored and adulterated with turmeric, whereby the said mustard as an article of food was damaged and its inferiority concealed, and it was thereby made to appear of greater and better value than it really was, the same not being a mixture or compound recognized as an ordinary article or ingredient of articles of food.

But he claimed that said article of mustard, so sold, was purchased by him as a pure article in good faith and that he believed at the time of the purchase by him and also at the time of the sale to the said Franke, that the same was pure mustard, free from any coloring and adulteration with turmeric or any other coloring or adulterant, and that no inferiority was concealed whereby it was made to appear of greater or better value than it really was; that at the time he purchased

the same he asked for pure mustard and that the same was warranted to him as pure; that he did not make or cause to have made a chemical examination of the same and did not inform himself or endeavor to ascertain the methods of determining pure from impure mustards, but relied upon the representations of his vender and the appearance of the article to the eye; and that he did not intend to violate the law.

From such conviction respondent appeals.

It is the contention of counsel for respondent that it was the intent of the legislature to provide by the act that no person should be convicted and punished for selling adulterated food or drink without showing that he knew the same to be adulterated; that the information does not charge such knowledge, and the proofs disclose that respondent acted in good faith and in the belief that the article sold was pure and unadulterated.

The act cannot be so construed. The offense under the act consists in selling an article intended to be eaten or drunk which is adulterated. Section 8 of the act shows conclusively that the legislature did not intend to make criminal intent or guilty knowledge a necessary ingredient of the offense. As a rule there can be no crime without a criminal intent; but this rule is not universal.

In *People v. Roby*, 52 Mich. 577 (50 Am. Rep. 270), the respondent was convicted of the offense under the statute of keeping his saloon open on Sunday. It was there said: "It is contended that to constitute an offense under the section referred to (How. Stat., Sec. 2274), there must be some evidence tending to show an intent on the part of the respondent to violate it. * * * The section under which Roby is prosecuted, makes the crime consist, not in the affirmative act of any person, but in the negative conduct of failing to keep the saloon closed. As a rule there can be no crime without a criminal intent; but this is not by any means a universal rule. One may be guilty of the high crime of manslaughter when his only fault is gross negligence, and there are many other cases where mere neglect may be highly criminal. Many statutes which are in the nature of police regulations, as this is, impose criminal penalties irrespective of any intent to violate them; the purpose being to require a degree of diligence for the protection of the public which shall render violation impossible.

Many cases are cited in that case where convictions were sustained although the element of guilty knowledge was lacking. Thus in Massachusetts a person may be convicted of the crime of selling intoxicating liquors as a beverage though he did not know it to be intoxicating.

Com. v. Boynton, 2 Allen, 160.

And the offense of selling adulterated milk, though ignorant of its adulteration.

Com. v. Farren, 9 Allen, 489.

Com. v. Nichols, 10 Allen, 199.

Com. v. Waite, 11 Allen, 264.

Com. v. Smith, 103 Mass., 444.

In Missouri a magistrate may be liable to the penalty for performing

the marriage ceremony for minors without consent of parents or guardians, though he may suppose them to be of proper age.

Beckham v. Nacke, 56 Mo., 546.

Where the killing and sale of a calf under a specified age is prohibited there may be a conviction though the party was ignorant of the animal's age.

Com. v. Raymond, 97 Mass., 567.

In *People v. Welsh*, 71 Mich. 548, this court in speaking of *People v. Roby*, supra, said: "When a statute does not make intent an element of the offense, but commands an act to be done or omitted which in the absence of the statute might have been done or omitted without culpability, ignorance of the fact or state of things contemplated by the statute will not excuse its violation;" citing:

State v. Hartfiel, 24 Wis., 60.

In the late case in this court of *Walcott v. Judge of Superior court*, 112 Mich. 311, the relator, as prosecuting attorney of the county, filed an information against one Fred Saunders, charging him with being engaged in selling liquor without giving the bond required by the statute. The bond was fair upon its face, but one of the sureties, it appears, was disqualified under section 2283dl, 3 How. Stat. The information did not allege that respondent had knowledge of this defect in the bond. The information was quashed by the court below, and the relator asked the aid of mandamus to compel the respondent to reinstate the case. It was said by this court in the majority opinion: "It was the intention of the legislature to make the execution and delivery of the prescribed bond a condition precedent to sale, and to require the person desiring to engage in the business mentioned to assume the responsibility of knowing that the bond when presented complies in all essential particulars with the law. He must know that his sureties are males, that they are resident freeholders of the township, village or city in which the business is to be carried on, that they hold none of the offices prohibited by the act, and that at the time the bond is filed neither is a surety upon more than two bonds required by the act."

It appeared that one of the sureties was already upon more than two bonds; and the writ was granted compelling the respondent to reinstate the case. The case of *People v. Roby* was cited in that case in support of the proposition that intent was not an ingredient of the offense.

These regulations are under the police power of the State. Undoubtedly it was competent for the legislature to prohibit the sale of adulterated articles of food and drink. The police power of the State extends to the protection of the health as well as of the lives and property of the citizens. Generally it is for the legislature to determine what laws and regulations are needed to protect the public health and secure the public comfort and safety. If it passes an act ostensibly for the public health and thereby destroys or takes away the property of the citizen or interferes with his liberty it is for the courts to determine whether it relates to and is appropriate to promote such public health. Under the

police power the conduct of individuals and the use of property may be regulated so as to interfere to some extent with the freedom of the one and the enjoyment of the other. It cannot be doubted that the legislature intended by this act to protect the public against the harmful consequences of sales of adulterated food, and to the end that its purpose might not be defeated to require the seller at his peril to know that the article which he offers for sale is not adulterated.

As was said by the supreme court of Ohio, in *State v. Kelly*, 54 Ohio St. 166: "If this statute had imposed upon the State the burden of proving * * * his knowledge of its adulteration, it would thereby have defeated its declared purpose."

In *State v. Smith*, 10 R. I. 260, the court in speaking of the offense of selling adulterated milk, said: "Counsel for defendant asked the court to charge that there must be evidence of a guilty intent on the part of the defendant and of a guilty knowledge in order to convict him. Our statute in that provision of it, under which this indictment was found does not essentially differ from the statute of Massachusetts, and there previous to the enactment of our statute the supreme court had determined that a person might be convicted although he had no knowledge of the adulteration; the intent of the legislature being that the seller of milk should take upon himself the risk of knowing that the article he offers for sale is not adulterated."

Statutes in many states have been passed providing that whoever sells, or keeps or offers for sale adulterated milk, or milk to which water or other foreign substances has been added shall be punished, etc. Under these statutes it has been decided many times that the risk is upon the seller of knowing that the article he offers for sale is not adulterated, and that it is not necessary in an indictment under such a statute to allege or prove criminal intent or guilty knowledge.

Com. v. Smith, 103 Mass., 444.

Com. v. Warren, 160 Mass., 533.

People v. Clipperly, 101 N. Y., 634.

The same rule that no criminal intent is necessary has been held to apply under an act forbidding the sale of oleomargarine or other imitations of dairy products; unless express notice be given to the purchaser.

Bayles v. Newton, 50 N. J. L., 549.

Com. v. Gray, 150 Mass., 327.

The English rule is in keeping with the doctrine in this country on this subject.

Roberts v. Egerton, L. R., 9 Q. B., 494.

The statute not requiring knowledge on the part of the seller to make the offense complete, we are satisfied that the conviction must be sustained. No case has been cited, and we are not able to find one, where a contrary doctrine was laid down. The act may work hardship in many cases; but that question is one to be addressed to the legislature and not to the courts. As we have said, it was within the power of the legislature to pass the act making it an offense punishable with fine and imprisonment to sell adulterated food or drink, although the

person selling the same has no knowledge that it is adulterated. Under this statute one making sales must do so at his peril.

The conviction is affirmed.

Grant, J., did not sit. The other justices concurred.

PEOPLE v. WORDEN GROCER CO.

(Opinion filed December 6, 1898.)

Constitutional Law—Act to Prevent Sale of Adulterated Vinegar—Complaint—Reasonableness of Statute—Defense.

1. The title to an act reading "An act in relation to the manufacture and sale of vinegar, and to repeal Act No. 224 of the Public Acts of 1889, approved, etc.," held broad enough to support an enactment to prevent deception in the sale of vinegar or to prevent adulteration of vinegar.
2. A conviction for a sale of "fermented cider vinegar" which was not up to the standard prescribed by Act No. 71, Public Acts of 1897, may be had under a complaint drawn under Section 2 of the act.
3. The question as to whether the requirements of an act passed to prevent the sale of adulterated vinegar are such as to render the act unreasonable, cannot be determined by the courts and does not raise a question of fact for determination by a jury.
4. Where a sample of vinegar is taken from a dealer for the purpose of testing it to see if it conforms to the standard required by law it is not necessary that a sample be left with the dealer.
5. A prosecution for a sale of vinegar in violation of Act No. 71, Public Acts of 1897, cannot be defended on the ground that the person so manufacturing or selling vinegar below the standard has no knowledge that it is not within the standard prescribed.

Error to the circuit court of Kent county; Allen C. Adsit, J.

Appeal of the Worden Grocer Co. from a conviction of a violation of act No. 71, Public Acts of 1897. Affirmed.

Frank A. Rodgers, Prosecuting Attorney; Benn M. Corwin, Assistant Prosecuting Attorney, for the people.

Rood & Hindman, for respondent.

Long, J.: The complaint in this cause charges that the defendant: "On February 5, 1898, did unlawfully sell and deliver to John T. Owens of Benton Harbor, Michigan, a large quantity, to-wit: One barrel of vinegar which was not then and there in compliance with the provisions of act No. 71, Public Acts, 1897, in this viz.: That said vinegar was sold as "fermented cider vinegar" and branded as such; that said vinegar contained less than one and three-fourths per cent, by weight, upon full evaporation (at the temperature of boiling water), of solids contained in the fruit from which said vinegar is fermented, to-wit: One and fifty-one one-hundredths per cent of solids; and said vinegar contained less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar was manufactured, to-wit: Eight one-hundredths of one per cent of ash or mineral matter, against the form of the statute in such case made and provided," etc.

The cause was commenced in the police court, and, being removed to

the circuit, came on to be heard before a jury. The defendant refused to plead, and counsel for defendant thereupon made a motion to quash the complaint and summons for several reasons which will hereafter be discussed. The court upon the trial directed a verdict of guilty, and the cause comes to this court on exceptions before judgment.

The title of the act reads: "An act in relation to the manufacture and sale of vinegar, and to repeal act No. 224 of the Public Acts of 1889, approved," etc. Sections one and two of the act, being the sections in question provide:

"Section 1. The People of the State of Michigan enact, That no person shall manufacture for sale, offer or expose for sale, sell or deliver, or have in his possession with intent to sell or deliver, any vinegar not in compliance with the provisions of this act. No vinegar shall be sold as apple, orchard or cider vinegar, which is not the legitimate product of pure apple juice, known as apple cider or vinegar not made exclusively of said apple cider or vinegar into which foreign substance, drugs or acids have been introduced, as may appear upon proper test, and upon said test, shall contain not less than one and three-fourths per cent, by weight, of cider vinegar solids upon full evaporation at the temperature of boiling water.

"Section 2. All vinegar made by fermentation and oxidation without the intervention or distillation shall be branded 'fermented vinegar' with the name of the fruit or substance from which the same is made. And all vinegar made wholly or in part from distilled liquor shall be branded 'distilled vinegar,' and all of such distilled vinegar shall be free from coloring matter added during or after distillation and from color other from that imparted to it by distillation. And all fermented vinegar not distilled shall contain not less than one and three-fourths per cent, by weight, upon full evaporation (at the temperature of boiling water) of solids, contained in the fruit or grain from which said vinegar is fermented, and said vinegar shall contain not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. And all vinegar shall be made wholly from the fruit or grain from which it purports to be or is represented to be made, and shall contain no foreign substance and shall contain not less than four per cent, by weight, of absolute acetic acid."

It appears by the testimony that the defendant, a Michigan corporation doing business at Grand Rapids, on February 5, 1898, sold a barrel of vinegar to one John T. Owens of Benton Harbor. The sale is admitted. A sample of the vinegar was taken from this barrel and analyzed by the State analyst, Mr. Fred H. Borradaile. The correctness of this analysis is not disputed. This analysis showed that the vinegar did not comply with the requirements of the statute in that it did not contain the amount of solids nor the amount of ash or mineral matter required.

The contentions made by counsel for defendant mostly relate to the validity of the act.

1. It is contended that the title to the act does not express any object; that the act was intended to prevent deception in the sale of vinegar or to prevent adulteration of vinegar, but that no such object is expressed in the title; and that the act is therefore in conflict with section 20 of article 4, of the constitution of this State, which provides that: "No law shall embrace more than one object, which shall be expressed in its title."

We think this contention sufficiently answered by what was said by this court in *Soukup v. Van Dyke*, 109 Mich. 681. There the title was: "An act relative to justices' courts in the city of Grand Rapids." It

was said: "The title is sufficient if it fairly and reasonably announces the object and that is a single one. If this requirement be observed, the legislature must determine for itself how broad and comprehensive shall be the object of a statute and how much particularity shall be employed in the title in defining it."

In *People v. Kelly*, 99 Mich. 82, the title under discussion was: "An act relative to disorderly persons, and to repeal," etc.

See also:

State v. County Judges, 2 Iowa, 280.

McAunich v. The Miss. & Mo. R. R. Co., 20 Iowa, 342.

2. Counsel contended that the complaint being drawn under section two of the act, no conviction can follow; that if any violation of the law be found, it is of section one and not of section two of the act; that, therefore, the complaint was drawn under the wrong section.

This contention cannot be sustained. It is plain from the reading of these sections that the legislature intended that all fermented vinegar should come up to the required standard whether made from fruit or grain.

3. The defendant contends that the act is unreasonable and therefore void as beyond the police power of the State, and that the test for cider vinegar in regard to solids is arbitrary, unscientific and not calculated to accomplish the end sought by the legislature, viz.: To protect the public health against spurious vinegar; that such test is no test, because:

a. Said solids and ash are indifferent ingredients of vinegar from a hygienic standpoint.

b. Their comparative absence or presence is not an essential ingredient of pure apple cider vinegar.

c. A vinegar can be manufactured which will satisfy the requirements of the statute and yet contain no materials from apples or the product of apples.

d. A pure apple cider vinegar is frequently made which is below the requirements of the statute in solids and ash.

e. The less proportion of solids is a proof of greater purity in the vinegar and of its better keeping qualities.

These questions might very properly be addressed to the legislature, but are matters with which the court has nothing to do. It is not a part of the functions of the court to investigate the facts entering into questions of public policy merely. Under our system that power is lodged in the legislative branch of the government. It belongs to that branch to determine primarily what measures are appropriate or needful for the protection of the public morals, the public health or the public safety.

Barton v. McWhinney, 85 Ind., 481.

Mugler v. Kansas, 123 U. S., 660.

Powell v. Pennsylvania, 127 U. S., 685.

In *People v. Snowberger*, 113 Mich. 92, it was said by this court: "The act may work hardship in many cases, but that question is one to be addressed to the legislature and not to the courts."

The question of the reasonableness of the acts found in many states relative to the sale of milk below a certain standard has been frequently raised in the courts, and the acts upheld.

In *Com. v. Evans*, 132 Mass. 11, the court passing upon such a statute, said: "The intention of the legislature and the practical operation of this section in connection with the third section is to provide that it shall be unlawful to sell milk containing less than thirteen per centum of milk solids. This belongs to the class of police regulations designated to prevent frauds and to protect the health of the people, which it is within the constitutional power of the legislature to enact."

In *State v. Smith*, 14 R. I. 100, the court said: "It was the purpose of the statute to prohibit, not only the dealing in milk which had been adulterated, but also in milk of such inferior quality as to fall below the standard named in section three. It is equally a fraud on the buyer, whether the milk which he buys was originally good and has been deteriorated by the addition of water or whether in its natural state it is so poor that it contains the same proportion of water as that which has been adulterated." See also:

State v. Newton, 45 N. J. L., 469.
Bertholf v. O'Reilly, 74 N. Y., 509.
State v. Campbell, 64 N. H., 403.
10 Am. St. Rep. 419.

But counsel contend that the reasonableness of this act is a question of fact for the jury to determine from the expert chemical evidence.

This question is neither for the court nor the jury to determine. In *People v. Clipperly*, 101 N. Y. 634, that very question was discussed and decided adversely to the claim here. It was said: "The defendant takes the broader ground that the legislature cannot under the constitution prohibit the sale of milk drawn from healthy cows which in its natural state falls below standard fixed by the act, unless such milk, or the articles made from it, are in fact unwholesome or dangerous to public health. How is that question of fact to be determined? The court cannot take judicial notice whether milk below the standard is or is not unwholesome or dangerous to public health. Is that to be a question for the jury? If so the court must charge a jury in each case that if they find milk below that standard to be unwholesome, then the statute is constitutional; if they find it to be wholesome, then the statute is unconstitutional. Evidently a constitutional question cannot be settled, or rather, unsettled in that way. The constitutionality would vary with the varying judgments of juries."

In the emery wheel case before us, in *People v. Smith*, 108 Mich., p. 534, a somewhat similar question was discussed. It was said: "If the courts find the plain provisions of the constitution violated, or if it can be said that the act is not within the rule of necessity in view of facts of which judicial notice may be taken, then the act must fall; otherwise it should stand."

See also:

People v. Girard, 145 N. Y., 109.
(45 Am. St. Rep. 595.)

4. Counsel also contended that defendant was not allowed, nor could

it obtain, a sample of the vinegar in question for analysis, and was deprived of the right to produce evidence as to the amount of solids in the vinegar; and was thus deprived of property without due process of law.

The record shows that the defendant was not prevented from getting a sample of the vinegar by any person interested in the prosecution of the suit. The record shows that the only effort it made to get such sample was a letter written to Mr. Owens who had bought and paid for the vinegar, requesting him to return it, to which the defendant received no reply, and it does not appear that Mr. Owens had any of the vinegar left at that time. No sample was left with the defendant by the prosecution; nor was this necessary.

Com. v. Coleman, 157 Mass., 460.

5. This statute forbids the manufacture and sale of vinegar not in compliance therewith, and persons manufacturing or selling vinegar below the standard do so at their peril. It is no defense that the person so manufacturing or selling vinegar below the standard has no knowledge that it is not within the standard prescribed.

People v. Snowberger, 113 Mich., 86; 71 N. W. R., 497.

We have examined the other questions raised, but do not deem it necessary to discuss them. They relate mostly to offers of testimony which the court below ruled out; and, we think, properly.

The testimony was uncontradicted that the vinegar sold was not in compliance with the statute. The sale was admitted.

The court was not in error in directing the verdict. The conviction must be affirmed.

Grant, C. J., did not sit. The other justices concurred.

PEOPLE v. DETTENTHALER.

GROSVENOR v. JACKSON CIRCUIT JUDGE.

(Opinions filed December 6, 1898.)

Constitutional Law—Passage of Act Without Enactment Clause—Constitutional Provision Mandatory—Addition of Clause by Governor—
Act 76, Laws of 1897, Invalid.

1. The provision in the Michigan State constitution, found in Sec. 48 of Art. IV that all laws shall be styled, "The People of the State of Michigan enact," is mandatory and the passage of an act without the enactment clause renders the act invalid.
2. The addition of the enacting clause by the Governor before affixing his signature will not render the law valid which was passed without an enactment clause.
3. Act No. 76, Laws of 1897, being "An act to prevent deception in the manufacture and sale of imitation butter" held to be invalid because of the passage of the act without an enactment clause was not rendered valid by the addition of such clause by the Governor before affixing his signature to the act.

Error to the superior court of Grand Rapids; Edwin A. Burlingame, judge.

Exceptions taken by Frank J. Dettenthaler from a conviction of a violation of the pure food law.—Reversed and no new trial.

Frank D. Rodgers, Prosecuting Attorney (Rogers, McDonald & Corwin of counsel), for the people.

Rood & Hindman and E. F. Sweet, for respondent.

Certiorari by Elliot O. Grosvenor, Dairy and Food Commissioner, to review the action of the Jackson circuit judge in denying a mandamus. Affirmed.

John G. Hawley and Benn M. Corwin, for relator.

Rood & Hindman and E. F. Sweet, for respondent.

Hooker, J.: These cases involve the validity of act No. 76, Public Acts, 1897, which is as follows:

"An act to prevent deception in the manufacture and sale of imitation butter."

Section 1. The People of the State of Michigan enact, That no person by himself or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream from the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

Sec. 2. Whoever violates any of the provisions of section one (1) of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail, or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court for each and every offense.

Approved April 15, 1897.

The evidence in the first entitled cause shows that the defendant was convicted of the alleged offense of selling oleomargarine in contravention of this act.

In the other a complaint was made of a similar act to a justice, who refused to issue the warrant, and on application the circuit court denied a mandamus to compel it. The cases raise substantially the same questions, and were argued, and will be considered together. The validity of the law is questioned. The record shows that this was a senate bill and passed the senate without the constitutional enacting clause. The records of the house show that the bill was reported by the committee on agriculture and the committee of the whole, without amendment, and with the recommendation that it be passed. Under the head of "third reading of bills upon passage," the record of the house shows that "pending the third reading of the bill, Mr. Chamberlain moved that the bill be recommitted to the committee of the whole, which motion did not prevail. The bill having been read a third time, and the question being upon its passage pending the taking of the vote, Mr. Graham demanded the previous question. The demand was seconded. The question being, 'Shall the main question be now put?' The same was ordered. The bill was then passed, a majority of all the members elect voting therefor, by yeas and nays as follows: * * * yeas 56,

nays 19." As this is the only time the bill was before the house, we must find that the bill passed the house without an enacting clause, unless the contrary can be shown by other evidence. Counsel undertook to show that it was amended in this particular, by the records of the senate, and the testimony of the clerk of the house. The evidence is in brief, that previous to the passage of the bill in the house the clerk noticed the absence of the enacting clause, and brought it to the attention of the house, and said that he would enter one, and accordingly wrote the words in the original bill, i. e., the one which was then before the house. He did not testify that the house took any action upon it, or that any record was made of it.

The senate record shows that the bill was subsequently returned to the senate, accompanied by a letter from the clerk of the house, reading as follows:

"House of Representatives,

"Lansing, April 7, 1897.

"To the President of the Senate:

"Sir—I am instructed by the House to return to the Senate the following bill:

"Senate bill No. 6, file No. 24, entitled

"'A bill to prevent deception in the manufacture and sale of imitation butter,' and to inform the Senate that the House has amended the same as follows: By inserting in line 1, Section 1, after the words 'Section 1,' the words 'The People of the State of Michigan enact.'

"Very respectfully,

"LEWIS M. MILLER,

"Clerk of the House of Representatives.

"In the passage of which, as thus amended, the House has concurred by a majority vote of all the members elect."

It further appears that the senate concurred in such amendment.

We must determine, therefore, whether the house is shown to have amended the bill by inserting an enacting clause and if not whether the law is valid without it.

The most that can be claimed is that there is oral testimony, that the clerk announced its absence and stated that he would supply it. Inferentially perhaps we may say that there was no objection made, but the evidence is silent as to what, if anything, occurred. There is nothing but this inference of silence which imports acquiescence in the amendment. There is nothing to show definite action by the house which alone had power to amend the bill before it. So that if the clause is essential to the validity of the act we need not discuss the propriety of admitting parol evidence to prove an amendment which should be shown by the record if one was authorized.

See Attorney General v. Rice, 64 Mich., 391.

Hart v. McElroy, 72 Mich., 446.

Sackrider v. Supervisors, 79 Mich., 66.

Is the constitutional enacting clause a requisite to a valid law? This must depend upon whether the constitutional provision is to be considered a mandatory provision or directory merely.

See Constitution, Art. IV., Sec. 48.

Among the authorities cited by the relator in support of his conten-

tion, is that of *Swann v. Buck*, 40 Miss. 268. The constitutional provision is similar to ours, and it was held that a substantial compliance was sufficient. In that case the style of the resolution was: "Resolved by the legislature of the State of Mississippi." The court was unable to discover a previous judicial decision of the question, but quoted Mr. Cushing to the effect that the prescribed "form must be strictly pursued, and that no equivalent language will be sufficient," and while declining to accept his rule said: "It is necessary that every law should show on its face the authority by which it is adopted, and promulgated, and that it should clearly appear that it is intended by the legislative power that enacts it that it should take effect as a law. These conditions being fulfilled all that is absolutely necessary is expressed. The word 'resolved' is as potent to declare the legislative will, as the word 'enacted.'"

The case of *McPherson v. Leonard*, 29 Md. 377, held that the provision of the constitution of Maryland was directory, and that the omission of the words, "by the general assembly of Maryland," did not render the law invalid. The question appears to have been treated as a new one.

The case of *Cape Girardeau v. Riley*, 52 Mo. 427, follows the Maryland case, in holding the provision directory; the court saying that after diligent search, no case holding to the contrary had been found. In this case like the one before us, the entire enacting clause was wanting. In this connection we may add that previous decisions of the same court holding the provision that writs should run in the name of the state, was directory, were given weight. In our State a contrary holding will be found.

See *Forbes v. Darling*, 94 Mich., 621.

There are, however, cases which take a contrary view of the law, and adhere to the doctrine asserted by Mr. Cushing, and the late Mr. Justice Cooley, in his work on constitutional limitations, 6 Ed., p. 93, viz.:

"But the courts tread upon very dangerous ground when they venture to apply the rules which distinguish directory and mandatory statutes to the provisions of a constitution. Constitutions do not usually undertake to prescribe mere rules of proceedings, except when such rules are looked upon as essential to the thing to be done; and they must then be regarded in the light of limitations upon the power to be exercised. It is the province of an instrument of this solemn and permanent character to establish those fundamental maxims and fix those unvarying rules by which all departments of the government must at all times shape their conduct and if it descends to prescribing mere rules of order in unessential matters, it is lowering the proper dignity of such an instrument, and usurping the proper province of ordinary legislation. We are not, therefore, to expect to find in a constitutional provision which the people, in adopting it, have not regarded as of high importance, and worthy to be embraced in an instrument, which, for a time at least, is to control alike the government and the governed, and to form a standard by which is to be measured the power which can be exercised as well by the delegate as by the sovereign people themselves. If directions are given respecting the time or modes of proceeding in which a power should be exercised, there is at least a strong presumption that the people designed it should be exercised, in that time and mode only; and we impute to the people a want of due appreciation of the purpose and proper province of such an instrument, when we infer that such directions are given to any other end. Especially when, as has already been said, it is but fair to presume that the people in their constitution have expressed themselves in careful and measured

terms, corresponding with the immense importance of the powers delegated, and with a view to leave as little as possible to implication."

There are some cases, however, where the doctrine of directory statutes has been applied to constitutional provisions, but they are so plainly at variance with the weight of authority upon the precise points considered that we feel warranted in saying that the judicial decisions as they now stand do not sanction the application.

The question arose in Washington territory over a law fixing the seat of government, and the opinion of Cushing was quoted and followed. 1 Wash. Ter. 116. The case of *Nevada v. Rogers*, 10 Nevada 250, decided in 1875, did the same. An extended discussion of the subject will be found in that case, in support of the proposition that the language of the constitution should be literally followed.

The opinion concludes with the following pertinent and emphatic language:

"Our constitution expressly provides that the enacting clause of every law shall be 'The People of the State of Nevada, represented in senate and assembly, do enact as follows.' This language is susceptible of but one interpretation. There is no doubtful meaning as to the intention. It is, in our judgment, an imperative mandate of the people in their sovereign capacity to the legislature, requiring that all laws to be binding upon them shall, upon their face, express the authority by which they were enacted, and as this act comes to us without such authority appearing upon its face, it is not a law."

The case of the *State v. Patterson*, 98 N. C. 662, is strong in its condemnation of the practice of treating constitutional requirements as directory. The case of *Powell v. Jackson*, 51 Mich. 130, is not in point, as the bill was duly and seasonably amended, if we may accept the statement of the briefs of the counsel and the syllabus.

The trend of the weight of the authority is in our opinion against the relator's contention.

It is urged with some plausibility that the insertion of this provision previous to the signature of the Governor is a sufficient compliance with the constitution, from which we understand the claim to be made that although the enacting clause was wanting when the bill came to the Governor it might have been supplied by him. But it is thought that this proposition is tenable only upon the assumption that the constitutional provision is directory merely. The Governor has no power to make laws. The legislative power is in no part vested in him, being by Sec. 1, Article IV, of the constitution, vested in the senate and house of representatives. It is not the design of the constitution that he should legislate. His office is a check on the legislature and he may compel a reconsideration of a bill by seasonably returning it to the appropriate house with his objection to it, and when the legislature has adjourned his neglect to sign it prevents it from becoming a law, but he has not the slightest power in framing the law. Indeed, it is a fundamental principle in American constitutions that the executive shall not make laws. The following language from the opinion in the case of *State of Nevada v. Rogers*, 10 Nev. 250, is apropos to this subject.

"Without the concurrence of the senate the people have no power to enact any law. Every person at all familiar with the practice of legislative bodies is aware

that one of the most common methods adopted to kill a bill and prevent its becoming a law, is for a member to move to strike out the enacting clause. If such motion is carried the bill is lost. Can it be seriously contended that such a bill, with its head cut off, could thereafter by any legislative action become a law? Certainly not. The certificates of the proper officers of the senate and assembly, that such an act was passed in their respective houses, do not, and could not impart vitality to any act which, upon its face, failed to express the authority by which it was enacted."

This being so, the only justification for the insertion of the enacting clause by the Governor is to be found in the assumption that it is a clerical omission of an unimportant matter and it might as well be held that one of the houses, or a clerk, or even the printer of the laws might make the correction, as that the Governor might do it.

Some of the states have sustained laws without enacting clauses, but we do not know of one that has made their validity depend upon the unauthorized action of some officer or person. They have preferred to rest their action upon the well recognized distinction between mandatory and directory provisions. If the provision is mandatory that the law shall have a prescribed style and the making of laws is confined to the legislative branch of the government, it cannot be consistently held that omissions of essential parts of law may be supplied and corrections made by persons without authority; and the public necessities should be much greater than in the present case, before such a proposition should be seriously considered. If on the other hand there is warrant for treating the provision as directory, a much less dangerous precedent is established. But as has been shown, the weight of authority forbids it, and in our opinion it will be an unfortunate day for constitutional rights when courts begin the insidious process of undermining constitutions by holding unambiguous provisions and limitations to be directory merely, to be disregarded at pleasure. In the present case it will be much better that the legislature shall correct its mistake, than that the courts shall sanction the irregular correction.

We are therefore constrained to hold that the law under discussion is void, and in the certiorari case the order is affirmed, in that of Detenthaler the conviction is reversed and no new trial ordered. The other justices concurred.

GROSVENOR v. DUFFY.

(Opinion filed September 18, 1899.)

Pure Food Law—Sale of Oleomargarine Colored to Imitate Butter—Constitutionality of Act.

The sale of oleomargarine colored with a harmless substance to imitate June butter, but which is sold and purchased as oleomargarine, is not in violation of section 3 of Act 118 of the Public Acts of 1897, being an act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink.

Certiorari to review the action of the Washtenaw circuit judge in refusing the application of Elliot O. Grosvenor, Dairy and Food Commissioner, for mandamus to compel John L. Duffey, justice of the peace, to issue a warrant. Affirmed.

Smedley & Corwin, for relator.

John J. Speed and J. P. Lee, for respondent.

The relator presented to a justice of the peace a complaint in writing, charging that "Casper Rinsey did unlawfully offer and expose for sale, and did unlawfully sell and deliver to said Elliot O. Grosvenor, a large quantity, to wit, one pound of oleomargarine, which was then and there an article of food intended to be eaten by man and which was then and there adulterated within the meaning of act No. 193 of the Public Acts of Michigan for the year 1895, as amended by act No. 118 of the Public Acts of Michigan for the year 1897, in this, to wit: that said oleomargarine was then and there an imitation of another article of food, to wit, an imitation of a rich June butter; and said oleomargarine had been and was then and there colored, whereby inferiority was concealed and by which means it was made to appear better and of greater value than it really was, to wit, in this: That it was thereby made to appear like butter of a grade which was then and there of a greater value than the said oleomargarine; that the said oleomargarine was labeled 'oleomargarine' and stamped with the seller's name; and that the tub and wrapper which contained the same bore the name and address of the manufacturer and was distinctly labeled oleomargarine."

"Said complainant on his oath aforesaid, further says, that he called for oleomargarine, and that the said oleomargarine was sold to him as oleomargarine the same as to an ordinary customer, freely and without objection and that for this reason he did not take the steps required by section 6, Act No. 154 of the Public Acts of Michigan for the year 1897."

The justice refused to entertain the complaint and issue a warrant, whereupon the relator applied to the circuit court for Washtenaw county for the writ of mandamus to compel the justice to issue a warrant and proceed to hear the case. The circuit court refused the writ and the case is brought to this court by certiorari for review.

Grant, C. J. (after stating the facts). The title of the act reads "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink." Sec. 3, as amended by act No. 118, Public Acts 1897, so far as it applies to this case, reads:

"An article shall be deemed to be adulterated within the meaning of this act: * * *

Fourth—If it is an imitation of, or sold under the name of another article * * *

"Sixth—If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is.

"Seventh—If it contains any added substance or ingredient which is poisonous or injurious to health: Provided, That nothing in this act shall prevent the coloring of pure butter. And provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale, bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definition fourth and seventh of this section.

It is not claimed that the sale made by Rinsey violates subdivision seven. The act charged in the complaint is neither adulteration, fraud nor deception under any definition of these words to be found in any dictionary. Adulteration is "the act of corrupting or debasing, the act of mixing something impure or spurious with something pure or genuine, or an inferior article with a superior one of the same kind."

Bouv., L. D., 126.
Century Dictionary.

Counsel do not urge that it comes within the word "fraud" or "deceit." Neither is it urged that the article is made to appear of greater value than it really is. It is not claimed that the coloring matter used is in the least deleterious. The law permits its use to color butter. Counsel rely upon *People v. Snowberger*, 113 Mich. 86. That case is not in point. The gravamen of the offense there was that the article of food was damaged, inferior, its inferiority concealed, and it was made to appear of greater value than it really was.

This brings us to the only question we need to determine, viz.: Is the title to the act broad enough to include the sale complained of? Would any person reading the title to the bill in the legislative journals, or elsewhere, suppose that the bill would make criminal an act which in itself was entirely harmless, honest, innocent and contained no element of wrong-doing? Or that it would change the well known definition of a word so as to include within it things which were in no sense akin to it and which could only be included in it by the most arbitrary legislative enactments? Would a manufacturer of, or dealer in butter or oleomargarine, be notified by the title that the harmless coloring of either was not only to be prohibited but to be punished by fine or imprisonment or both? There can be but one answer to these questions. When the legislature attempts to change definitions and to make acts criminal which per se are innocent and contained no element of wrong, there must be something in the title to show such purpose or object under Sec. 20, Art. 4 of the constitution. The title

contains not even an intimation that an entirely innocent act is to be made a crime. It follows that this part of the act is void.

Bissell v. Wayne Probate Judge, 58 Mich., 237.
Northwestern M'fg Co. v. Wayne Circuit Judge, Id., 381.
McKellar v. Detroit, 57 Mich., 158.

This statute is assailed as unconstitutional upon other grounds. This disposal of the case renders it unnecessary to discuss them. How far the legislature may go, under the police power inherent in the State in prohibiting and punishing acts which in themselves are perfectly harmless, would be an interesting subject of inquiry, but as it is not necessary to a disposal of the case we decline to enter upon it.

Judgement affirmed. The other justices concurred.

PEOPLE v. SKILLMAN.

(Opinion filed March 4, 1902.)

Pure Food Law—Section 5022 C. L. Construed—Action Against Traveling Salesman.

A traveling salesman for a wholesale grocery firm, residing out of the State, took an order in this State for pure fruit jelly and forwarded the order to his employers. The order was filled with imitation fruit jelly. Information was filed against the salesman under section 5022 C. L., regulating the manufacture and sale of imitation fruit jellies. *Held*, That respondent was not guilty of violating the terms of the statute.

Error to the circuit court for Muskegon county. Fred J. Russell, judge.

Appeal of John Skillman from a conviction under the pure food law, new trial ordered.

Chas. B. Cross, Prosecuting Attorney, for the people.

Elliot O. Grosvenor and Smedley & Corwin, for respondent.

Moore, J.: An information was filed against the respondent which, omitting the formal parts, reads as follows: "That one John Skillman heretofore, to wit, on the sixteenth day of September, A. D. 1901, at the city of Muskegon, in the county of Muskegon aforesaid, did unlawfully offer for sale and did sell to Albert Towle a large quantity, to wit: a certain compound under the name of Quince Jelly which was then and there adulterated within the meaning of the act No. 193 of the Public Acts of the State of Michigan of the year 1895, as amended by act No. 118 of the Public Acts of the State of Michigan of the year 1897, as amended by act No. 117 of the Public Acts of the State of Michigan of the year 1899, in this, to wit: That said compound was then and there made and composed in part of glucose, starch and other substances and was then and there colored in imitation of fruit jelly contrary to the form of the statute."

After the testimony was all in, a motion was made asking the judge, for various reasons, to direct a verdict in favor of respondent. This

motion was overruled. The case was submitted to the jury which returned a verdict of guilty.

A great many errors are assigned. We think some of them which we shall discuss are well taken, but as the case if ever tried again, will not present the same questions now presented by counsel we deem it unnecessary to pass upon all the questions argued by them in the briefs.

To sustain the case of the people testimony in substance as follows was introduced: It was shown the respondent had for some years been a traveling salesman in the employ of Reid, Murdock & Company of Chicago, that he solicited an order from Mr. Towle, a grocer in Muskegon, that Mr. Towle gave him an order for a case of assorted pure fruit jelly. Mr. Skillman did not have the goods with him, but reduced the order to writing in the presence of Mr. Towle at his store, and forwarded it to the house in Chicago. It is as follows:

"Reid, Murdock & Co., Chicago,
Sept. 12, 1901.

Name: Albert Towle.
Town: Muskegon.
State: Michigan.
Ship by Barry Line.
Salesman, Skillman.

| | |
|-----------------------------------|-----|
| 1 c P. F. Jelly Med. Asst..... | 100 |
| 1 c P. F. Jelly Med. Currant..... | 100 |
| 60 days." | |

"1 c P. F. Jelly Med. Asst." was explained to mean one case pure fruit jelly medium sized assorted glasses. Mr. Towle testified Mr. Skillman claimed it was pure fruit jelly for which he took the order, and that was what he intended to buy. It was not shown that respondent had anything further to do with the transaction than as above stated. Later a case of goods was received from Reid, Murdock & Company and testimony was given tending to show that a tumbler of this jelly was sold to Mr. Bennett, inspector of the Dairy and Food Department of Michigan, and by him forwarded to the State analyst, where it is claimed upon analysis it was shown to be a mixture of fruit juice, glucose, starch and coloring matter. Upon the cross examination of Mr. Towle the following occurred.

"Q. Did you give Mr. Skillman more than one order for fruit jelly about this time? A. Well, he had two or three orders, I think, two at least.

"Q. Two orders? A. One of them might have been ordered by mail.

"Q. Now you received two consignments of fruit jelly from the orders you had given to Mr. Skillman? A. I think so, yes, sir.

"Q. Upon which one of these orders did you receive this particular tumbler of jelly that you afterwards sold to Mr. Bennett? A. I couldn't say. The one that he bought was out of that order I think. (Witness pointing to order exhibited.)"

The defense claimed that the label "pure fruit jelly" placed upon the tumbler analyzed was put there by mistake. It was their claim that Reid, Murdock & Company dealt in two kinds of jelly, those made out of pure fruit and those made in imitation of pure fruit, and that

when the imitation was sold in Michigan and certain other states their instructions were to label them "imitation," and that these instructions were furnished in writing to their agents, including the respondent, and they offered testimony tending to prove this claim. The written instructions were also offered in evidence, but with the testimony offered were excluded by the court.

Among other requests offered by the respondent was the following:

"Under the undisputed evidence in this case there is nothing to show that the respondent offered to sell any jelly in violation of any statute of this State, but on the contrary, it is shown that respondent offered to sell strictly pure fruit jelly and sent such an order to Reid, Murdock & Company of Chicago, Illinois, and the charge in the information for selling and offering to sell adulterated jelly is not sustained by the evidence, and your verdict should be not guilty."

The judge refused to give this request, but charged the jury, "It is recognized by the legislators and is a matter of common knowledge that many of the wholesalers that are doing business in Michigan are not residents of this State, so the legislature saw fit to make a law where a man soliciting the sale of pure jellies, took an order for the sale of pure jellies, and in response to that order and offer, a different class of goods was furnished, that the party should be guilty of violating this particular law. In other words, instead of that order or offer and the furnishing of goods delivered to the party by a party who might be a non-resident of the State, that it should relate to the man who actually made the offer, the man who actually took the order for the furnishing of this particular article. The people claim that this is the matter in which this defendant here is liable."

This statement of the law is sought to be justified by *People v. Snowberger*, 113 Mich. 86, and *People v. Grocer Co.*, 118 Mich. 604, 71 N. W. 497, 67 Am. St. Rep. 449, 77 N. W. 315. A reference to these cases will show that the respondent in each of them admitted making the sale of the goods. In this case the respondent denies that he sold any goods coming within the provisions of the statute. Giving the only interpretation to the testimony as it appears in the record which can be fairly given to it shows Mr. Towle was solicited to give an order for pure fruit jelly. He gave such an order. It was reduced to writing and in the writing the jelly was described as pure fruit jelly. As before stated the only connection of the respondent with the transaction as shown by the record is the taking of an order for an article not within the terms of the statute and forwarding it. This does not constitute an offense. It might as well be urged that if a traveling salesman takes an order for Michigan beet sugar and forwards a written order for such sugar, and if the house, instead of filling the order as written, sends glucose with a label upon the package containing it calling it Michigan beet sugar the salesman would be guilty of an offense. This we do not understand to be the law. Upon the case as made the circuit judge should have directed a verdict of not guilty. *People v. Howard*, 50 Mich. 242, 15 N. W. 101.

The verdict is set aside and a new trial ordered.

Long, J., did not sit. The other justices concurred.

THE PEOPLE v. MORSE

(Opinion filed June 3, 1902.)

Pure Food Law—Sales by Agents—Criminal Responsibility for Acts of Principal.

1. A traveling salesman who in good faith takes an order for "pure pepper," which is filled by his principal with impure pepper, is not guilty of a violation of Public Acts 1895, No. 193, forbidding the sale of impure foods.
2. Public Acts of 1895, No. 193 (Pure Food Laws), Sec. 17, providing that the taking of an order for future delivery of any of the articles covered by the "act shall be deemed a sale, within the meaning of the act," does not make an agent absolutely responsible for the acts of his principal in filling the orders taken by such agent, and an order by the agent which is filled by the principal as an entirety may be, under the act, a sale of impure food, as to the principal, and yet not such as to the agent.

Error to circuit court, Muskegon county; Fred J. Russell, judge.

John W. Morse was convicted of a violation of the pure food law, and he brings error. Reversed.

Underwood & Umlor, for appellant.

Chas. B. Cross, Prosecuting Attorney, and George S. Lovelace, Assistant Prosecuting Attorney, for the people.

Hooker, J.: The brief filed on behalf of the people states that the case is similar to that of the People v. Skillman, 8 Detroit Legal News, 1090, 89 N. W. 330, and in effect concedes that the case must be reversed if we adhere to our former decision.

The defendant took an order for some pepper, as and for pure pepper, to be shipped to a dealer in Muskegon, by defendant's principal, a wholesaler in Chicago. The pepper when sent was not pure.

It is insisted that the Skillman case is at variance with the weight of authority elsewhere, and contrary to our own cases, in which it is said that we have held that a guilty intent on the part of a vendor is not essential to an offense, under the pure food law (Public Acts 1895, No. 193). It is further said that in the decision in the Skillman case, section seventeen of the act must have been overlooked or considered unconstitutional.

The transaction in which the order was taken did not involve an immediate delivery of pepper, then and there present. It is not shown that the sample, if there was one, was the same as the pepper subsequently sent, or that it was in the least impure. If it be conceded that the agent acted in good faith, and we understand that it is not questioned, he took an order for pure goods, and in doing that certainly committed no offense. It is now urged that the exigencies of the enforcement of this law are such, that we should hold that this innocent and lawful action, may be made a crime by the subsequent act of the principal, either intentional or inadvertent, in departing from, instead of performing the contract which his agent had innocently made. We think this is not so, and we are also of the opinion that this does not necessarily do violence to section seventeen. This transaction, as an entirety, may have been a sale of impure pepper under the statute as to the principal, and not as to the agent. If the order had been taken, with knowledge on the part of the agent of a practice

to send impure pepper on such orders, a different question would be presented.

The judgment is reversed and a new trial ordered.

Long, J., did not sit. The other justices concurred.

PEOPLE v. ROTTER.

(Opinion filed June 24, 1902.)

Food—Oleomargarine Act—Constitutional Law—Statutes—Title—Object.

1. Public Acts 1901, No. 22, entitled "An act to prevent deception in the manufacture and sale of imitation butter," which in addition to forbidding sale of imitation butter, prohibits sales of colored oleomargarine, is not, on that account, open to the objection that the object is not expressed in the title, as required by Const. Art. 4, Sec. 20.
2. The act is not in contravention of the fourteenth amendment of the federal constitution.
3. The act is a valid exercise of the police power.

Error to circuit court, Emmet county; Frank Shepard, judge.

George W. Rotter was convicted of selling colored oleomargarine, and brings error. Affirmed.

Smedley & Corwin, Sears, Meagher & Whitney (James F. Meagher and Kay Wood, of counsel), for appellant.

Horace M. Oren, Attorney General, and Matthew F. Guinon, Prosecuting Attorney, for the people.

Hooker, C. J.: At its last session, the legislature passed an act under the title, "An act to prevent deception in the manufacture and sale of imitation butter." Public Acts 1901, No. 22.

Section 1 of said act provides that:

"No person by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter."

Section 2 prescribes a penalty for the violation of the act.

The defendant was a grocer in Emmet county, and is shown to have sold a package of oleomargarine, which by an analysis was proven to have contained artificial coloring matter, and that said oleomargarine was not made wholly from unadulterated milk or cream from the same, and that it was made in imitation of yellow butter, produced from unadulterated milk or cream from the same. The court was asked to direct a verdict of not guilty upon the grounds:

1st. That the object of the act was not expressed in the title, as required by section 20 of article 4 of the constitution of this State;

2d. That the act violates the fourteenth amendment of the constitution of the United States, and article 6, section 32, of the constitution of this State;

3d. That it was not within the police power of the State.

The evidence conclusively shows that no deception was used in selling the oleomargarine, and there is nothing to indicate that there was any harmful ingredient therein, but that, on the contrary there was not such ingredient. The defendant was convicted, and the case is here on exceptions before sentence.

It is contended that the title to the act indicates that the act was designed to prevent deception in the manufacture and sale of imitation butter, while the act attempts to go further and prevent all sales of such colored oleomargarine.

If oleomargarine colored yellow, closely resembles yellow butter, made from milk or cream, it cannot reasonably be said not to resemble or imitate yellow butter. Butter is a well known commodity. From time immemorial it has had but one origin, viz.: from the churning of milk or cream. Whatever may be said of the possibility of making a product from other compounds than milk or cream that shall closely resemble or be chemically identical with butter, the world has but one understanding of what is meant by the word "butter," and we must assume that such is the sense in which our legislature used the term. Compiled laws, Sec. 50, Sub. 1.

A fair inference from this statute is that the legislature undertook to prevent deception, by preventing the sale of any yellow oleomargarine, and it undertook to accomplish this by the most effective means, viz.: by prohibiting the coloring of oleomargarine yellow, thereby avoiding the embarrassment which would otherwise arise from the necessity of proving in each case, that deceit was used in selling it, as and for butter. We think this is fairly within the title, whatever must be said of the other points raised. We are referred to the case of *N. W. Mfg. Co. v. Chambers*, 58 Mich. 381, 25 N. W. 372, 55 Am. Rep. 693, as conclusive of the question, in which case it is said that "all that could be done under such a title would be to prohibit and prevent sale of such articles under false pretenses." We are of the opinion that this language is too restrictive, and that it is at variance with the settled doctrine in this State, that any provision, naturally calculated to accomplish the object expressed in the title may be included in the act.

See:

Soukup v. Van Dyke, 109 Mich. 681.

People v. Wordon Grocer Co., 118 Mich. 607.

The case cited was rightly disposed of upon another ground, and it is possible that the language above quoted should be considered a dictum. Moreover the cases are distinguishable for whereas, that act attempted to prevent all sales of imitation butter, and was therefore perhaps inconsistent with the title, which apparently contemplated lawful sales, the statute under consideration in the present case, does not prohibit sales of oleomargarine, which is not tainted with the prohibited ingredients.

It is unnecessary to discuss the other points at length for the reason that the uniform trend of judicial opinion is that such laws are valid.

State v. Meyers, 42 W. Va. 825; 35 L. R. A. 844.
 New Hampshire v. Marshall, 1 L. R. A. 51.
 Powell v. Penna, 127 U. S. 678.
 People v. Armsberg, 105 N. Y. 113.
 Butler v. Chambers, 36 Minn. 69.
 People v. Worden Grocer Co., 118 Mich. 604.
 People v. Armsberg, 105 N. Y. 123.
 State v. Crescent Creamery Co., 86 N. W. 107.
 State v. Ball, 46 Atl. Rep. 50.
 Commonwealth v. Van Dyke, 13 Pa. Sup. Ct. Rep. 484.
 Commonwealth v. McCann, 14 Pa. Sup. Ct. Rep. 221.
 Armour Packing Co. v. Snyder, 84 Fed. Rep. 136.
 Cap. City Dairy Co. v. State, 22 Sup. Ct. Rep. 120.
 Wright v. State, 41 Atl. Rep. 795.

We are of the opinion that the legislature had the power to pass this law, and its wisdom of policy is not for our consideration.

The judgment is affirmed and the court directed to sentence the defendant.

Long, J., did not sit. The other justices concurred.

PEOPLE v. PHILLIPS.

(Opinion filed Sept. 17, 1902.)

Food—Adulteration—Statutes—Oleomargarine—Yellow Butter.

1. The phrase "yellow butter," is used in Act No. 22, Acts 1901, making it an offense to sell or offer for sale oleomargarine colored in imitation of "yellow butter" made from pure milk or cream, of the same, means any butter produced from pure milk or cream thereof having a "perceptible shade" of yellow.

Error to circuit court, Kalamazoo county; John W. Adams, judge.

John W. Phillips was convicted of selling oleomargarine, in violation of act No. 22, Acts 1901, and he brings error. Affirmed.

Frank E. Knappen and E. M. Irish, for appellant.

Sheridan F. Master, Prosecuting Attorney, and Dallas Boudeman, for the people.

Moore, J. The respondent was convicted of having on hand with intent to sell, and offering for sale oleomargarine, colored in imitation of yellow butter, contrary to the provisions of act No. 22 of the legislature, passed at the session of 1901.

It is claimed by respondent this law is unconstitutional and is an invalid law. That question was decided in the very recent case of People v. Rotter, against the contention of respondent, and need not be discussed here. It is urged as a matter of defense, and we quote from the brief of counsel, "that the statute is only aimed against the imitation of a substance which the legislature recognizes as yellow butter, and

1. The court should take judicial notice that all butter with a trace of yellow in it is not the yellow butter of commerce.

2. That if this is not true as a proposition of judicial notice, and the court cannot know it, then the respondent should have been allowed to prove if he could that there was such a usage of commerce.

3. That the statute is vague and indefinite in not defining the elements of the statutory crime it attempts to carve out of an act innocent per se, in that it gives no standard for determining what the color of yellow butter is that is not to be imitated."

The trial judge charged the jury upon that branch of the case as follows:

"It is not necessary in this case for the people to have proved that the respondent himself colored the oleomargarine if you find beyond a reasonable doubt that it was colored. The offense is just as complete, so far as this is concerned, if the respondent purchased oleomargarine colored, as above indicated. The offense as above stated consists of having the oleomargarine colored as before indicated, in his possession, with intent to sell the same, or in exposing it for sale; and if the respondent sold it in the same condition as he bought it, there would be no defense in this case. The respondent, gentlemen of the jury, is not charged in this information with selling this article; and if you find beyond a reasonable doubt he sold it as claimed by the people in the testimony offered, you may consider this fact on the question of whether respondent had or did not have the article in his possession for the purpose of selling it. And you must not consider it for any other purpose. If you find beyond a reasonable doubt that respondent did sell the article mentioned in the information to the parties claimed by the people, that would satisfy the statute upon the question of intent to sell. It is not necessary in this case to entitle the people to a conviction, that the oleomargarine should have been colored to represent any particular kind of yellow butter. That is, such yellow butter as the statute mentions, and as I have indicated to you the statute mentions. If the coloring was put into it, and by using such coloring the oleomargarine was in imitation of light yellow butter, such as the statute mentions, that is, yellow butter produced from pure, unadulterated milk or cream from the same, the offense is committed just the same, as if it had been colored to represent darker yellow butter. If you will find it to have been oleomargarine and was colored in such a manner as to be in imitation of any kind of yellow butter, that would satisfy the statute upon the requirement of the question of color. Yellow butter I define to be any butter produced from pure, unadulterated milk or cream of the same having a yellow color.

"It is necessary in order for the jury to convict the respondent, for you to find beyond all reasonable doubt that the article in the package sold was colored in imitation of yellow butter produced from pure, unadulterated milk or cream of the same. If you find beyond a reasonable doubt under the testimony in this case that there was some coloring matter in this article, still if you find that there was not enough coloring matter in this article to cause it to look like yellow butter having a perceptible shade of yellow, said butter having been produced from unadulterated milk or cream from the same, then you must acquit. But if you find beyond a reasonable doubt there was coloring matter in said article and sufficient coloring matter in said article and sufficient coloring matter therein to make it look like yellow butter, having any perceptible shade of yellow, said butter having been made from unadulterated milk or cream from the same, that would be sufficient so far as the requirement of the statute upon the question of coloration is concerned."

We think this was a proper construction of the language used in the statute.

The conviction is affirmed and the case remanded for further proceedings.

Long, J., did not sit. The other justices concurred.

PEOPLE v. JENNINGS.

(Opinion filed April 7, 1903.)

Adulteration of Food—Omission of Ingredients—Coloring Matter—Remarks of Court.

1. There not having been incorporated in the pure food law of 1895 (Public Acts of 1895, p. 358, No. 193), any specific formula for the manufacture of lemon extract, it is proper to resort to the United States Pharmacopoeia formula to determine of what lemon extract consists.
2. The pure food law of 1895 (Public Acts 1895, p. 358, No. 193), is not intended to prevent manufacturers of articles of food from improving the same, so long as no infringement of the law or spirit of the act defining adulteration takes place.
3. The provisions of Comp. Laws, Sec. 5012, that an article shall be deemed adulterated, "second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it"—should be read together, and the provision first recited construed as prohibiting the substitution for an essential ingredient of any cheaper or inferior substances.
4. Comp. Laws, Sec. 5012, declaring that an article shall be deemed adulterated, "sixth, if it is colored * * * whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is," does not preclude the use of coloring matter not injurious to health in any way.
5. It is improper for the court to refer to expert testimony as "boughten testimony."

Exceptions from circuit court, Muskegon county; Fred J. Russell, judge.

Charles W. Jennings was convicted of violating the pure food law, and brings exceptions. Reversed.

Charles A. Blair, Attorney General, and Charles B. Cross, Prosecuting Attorney. (Cross, Lovelace & Ross, of counsel), for the people.

Knappen, Kleinhans & Knappen and L. N. Keating, for defendant.

Montgomery, J. This is a prosecution under the Pure Food Law, so called. The defendant was convicted under an information charging him with selling a compound as a lemon extract which was adulterated within the meaning of act No. 193, P. A., 1895, and was a compound in imitation of extract of lemon. The respondent was convicted and brings the case upon exceptions before sentence.

The evidence on the trial introduced by the defendant tended to show that lemon oil contains from three to ten per cent citral, so-called, and upwards of ninety per cent of so-called terpenes; that these terpenes represent the oil property; that they are in reality the oil itself freed from the citral; that citral is the principal flavoring and odor-bearing property of lemon oil; that the tendency of terpenes in the oil of lemon is to deteriorate or become rancid by long standing, and that because of this the extract or spirits of lemon in which terpenes appear in usual quantities become turpentiney, both in smell and taste, and that for this reason it is undesirable to have terpenes present; that the terpenes have a biting taste, easily developing a turpentine taste, not the true flavor of the lemon fruit. There was also testimony tending to show that this fact created a demand for terpeneless oils

and that terpeneless lemon oils had been manufactured and sold commercially for a considerable time.

On the part of the prosecution the testimony of the chemist of the Pure Food Department was to the effect that taking as a standard of extract of lemon the spirits of lemon as defined by the United States Pharmacopoeia formula that the extract produced by the respondent showed no lemon oil present. It further appears that spirits of lemon made according to the pharmacopoeia formula would contain from 25-100 to 35-100 of one per cent of citral. It also appeared that 30 per cent of alcohol appeared in the product made by respondent, and that according to the pharmacopoeia formula 80 per cent was used, and that it cost less to make the extract using but 30 per cent of alcohol than if 80 per cent was used. It was also shown that a trace of coal tar dye was found in the extract made by respondent, but it was conceded that there was nothing whatever injurious in the extract as prepared by Mr. Jennings. The extract sold by respondent was made by what is known as the shaking out process, the purpose being to make an extract that contains no oil and as little alcohol as possible, a product that simply contains the flavoring properties of the lemon oil without the terpenes. This system has been employed by Mr. Jennings and by other manufacturers for the past three years; and it is claimed that all the elements and properties of lemon oil remained except the terpenes, and the testimony tended to show that the complete flavoring qualities are extracted by this process.

The circuit judge charged the jury as follows:

"In 1895 the legislature of this state thought it wise to pass a law relative to the adulterations of food and food products. Perhaps there may have been some amendments since that time, but that was the foundation of the law. That law covers lemon extract as it covers all other products that are sold on the market. It seems at the time the law was passed and since that time there hasn't been—there isn't incorporated within that law any special formula for the manufacture of lemon extract. Now, we can hardly say, gentlemen of the jury, that at the time of the passage of that law that the legislature didn't have some recognized and defined standard by which these essences or extracts should be governed or controlled. I think it would be hardly fair to the legislature to claim that there wasn't a standard they had in their mind at that time, and for the purposes of this case I will instruct you gentlemen, that at that time and at this time this standard that appears here in the United States Pharmacopoeia is the standard recognized by the legislators of this State and the one to which—the one that is in force so far as it applies to the Pure Food Law of this State with reference to that particular product. And if this lemon extract is manufactured in conflict with that formula as I shall hereafter call your attention to it, and you should find from the evidence, why it would be your duty to convict the defendant here.

"By that formula it appears that it is necessary to have five per cent of lemon oil in the lemon extract and that lemon oil shall be cut by a sufficient quantity of alcohol to perform that act. Of course, you know that that means in common parlance it should dissolve the oil. In addition to that, as the evidence tends to show in this case, after those things are put together, the fluid, whatever it might be, would be nearly the color of water. As coloring there may be or should be five per cent of lemon rind, and those ingredients when added together would be lemon extract, and that, gentlemen, will be the standard as applied to the Pure Food Law of this State. Now, gentlemen, I don't mean by that statement that lemon extract cannot be manufactured by any other process except by that to which I have called your attention. I don't mean that. It is the claim of the defendant here that he has discovered a process by which he can manufacture lemon extract containing all of the qualities that lemon extract manufactured according to that formula would possess and not have entirely all of the ingredi-

ents in the first instance that are provided in the formula. And as I view this case, gentlemen, that is one of the important propositions in connection with this case—that, and the question of coloring—in the judgment of the court is the case, and that all of the testimony in the case here revolves itself about those two propositions.

"It is the claim of the defendant, as I say, he has discovered a process by which he can produce in this lemon extract all the qualities that would be produced by adding alcohol and lemon oil together, and that manufacturing it by that means he produces it chemically by taking a larger quantity of lemon oil and extracting certain parts of it. Now, gentlemen, if you find and are satisfied by the evidence in this case that after this lemon extract was manufactured as defendant here claims he did manufacture it possesses all the qualities in strength and otherwise that it would possess if manufactured according to this formula, he is not guilty under this law. That is, he is not guilty of manufacturing an impure article, unless there are certain other articles that enter into the case to which I call your attention. As I say, in the first instance, it is claimed that according to the formula it should be alcohol and five per cent of lemon oil. Now if by some other process he can manufacture from the lemon oil and alcohol a product that would contain all of the elements that these two elements would contain if so mixed, he would not be guilty so far that would be lemon extract except the color of it.

"It is conceded here by all parties in interest, I think, that the only object of the lemon peel is to produce coloring. But there is another element to which the prosecuting attorney has called our attention. The evidence tends to show, gentlemen, that if this product is produced as claimed here on the part of the defendant, that after production by this process that the product would be nearly white. As I say, if it contained all of the elements of lemon extract, I don't think he would be guilty under this law, and if you are so satisfied, of course, at that point it would be your duty to find a verdict of not guilty unless there is some other matter in which he has violated this law.

"There is another provision of this Pure Food Law that provides that ingredients shall not be colored. In this case it appears that after this fluid substance is produced which he claims is just the same as produced under this formula, that he desires to change it to a lemon color. In other words, he puts in an ingredient which he claims would produce the same effect as this lemon rind. What is the object, gentlemen, or what was the object of Mr. Jennings adding this color? If the object was by any means to make it appear better or of greater value than it really is; if that was the object in adding that product, of course, it is your duty without any question to find this defendant guilty, because he hadn't any right to add that kind of a product or any other kind of a product to this fluid which he had produced and sell it for lemon extract, because that is a direct violation of one of the provisions of this Pure Food Law."

We think this charge presents fairly three questions for consideration: First, whether the pharmacopoeia formula is to be considered as defining lemon extract; second, if so, whether an omission of ingredients not essential to its purposes as a food product is a violation of the statute; third, whether the instruction relative to the addition of coloring matter should be sustained.

The statute defining what shall be deemed adulteration, so far as it relates to this case, declares that an article shall be deemed adulterated when: "First, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; fourth, if it is an imitation of, or is sold under the name of another article; * * * sixth, if it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it

really is; seventh, if it contains any added substance or ingredient which is poisonous or injurious to health." Compiled Laws, Sec. 5012.

We are agreed with the circuit judge that in referring to articles of food and to protect the users thereof the legislature must have had in view some standard, and as lemon essence or lemon extract had therefore acquired a well-defined meaning we incline to the view that it is proper to resort to the pharmacopoeia formula for the purpose of determining what lemon extract consists of. Does it follow from this that the legislature intended to prohibit improvement in the manufacture of lemon extract? If a means should be discovered by which a larger percentage of the flavoring quantity of the lemon might be extracted would it be an infraction of this law that the manufacturer should use such larger proportion of the essential ingredient of the lemon extract? We think not. We think it is open to manufacturers to improve a common article of food so long as no infringement of the law or spirit of the act defining what shall be deemed adulteration takes place. According to the proofs offered by the defendant it is very clear in the present case no substance or substances have been mixed with this extract so as to lower or depreciate or injuriously affect its quality, strength or purity.

As to the second condition which amounts to adulteration the case is not so clear. This provides that if any inferior or cheaper substance or substances have been substituted wholly or in part for it, that it shall amount to adulteration. We think, however, this provision should be read in connection with the succeeding one, to wit: "If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it." So construed the provision prohibiting the substitution of any inferior or cheaper substance, wholly or in part, for it means the substitution for an essential ingredient of such cheaper or inferior substance. Now if it be a fact, as the testimony on the part of the respondent tends to show, that it is a positive advantage to exclude the terpene wholly from the extract and to lessen the quantity of alcohol used, then the essential ingredients of lemon extract have not had substituted for them anything inferior or cheaper. We are aware that this view of the law may make it more difficult to establish the individual case, but as the statute is a penal statute it should receive a strict construction.

It follows from the views above expressed that the instruction of the learned circuit judge was erroneous inasmuch as the jury were told in effect that if *any* ingredient of lemon essence as defined by the pharmacopoeia was wanting in this extract sold by the respondent that there should be a conviction. We think the instruction should have been that if the lemon extract sold by respondent contained all the ingredients and in quantities such as prescribed by the pharmacopoeia which are adapted to use as food, and that nothing was eliminated except such ingredients as could be dispensed with without injury to the product as a food product there was no violation of the statute.

The only other provision of the statute involved is the sixth, which in effect prohibits coloring the article produced whereby damage or inferiority is concealed. The instruction upon this branch of the law was also erroneous if we are correct in our view of the main question.

The elimination of non-essential ingredients from the extract certainly does not show damage or inferiority, and as the conceded facts are that the coloring matter employed was not injurious to health in any way this provision has no application.

The other questions discussed do not require special mention. It may be noted in passing that the circuit judge in referring to the testimony of expert witnesses spoke of it as boughten testimony. We think this expression was unfortunate. While it is proper for the jury to take into account the fact that expert witnesses are employed at an extra compensation paid them, the implication that the extra compensation necessarily amounts to a purchase of their testimony is hardly warranted; while the jury may consider this fact as bearing on their credibility, it is not proper that the court should intimate an opinion of that character.

The judgment should be reversed, and a new trial ordered.

The other justices concurred.

BENNETT v. CARR.

(Opinion filed July 14, 1903.)

Pure Food Law, Act. 22, P. A., 1901, construed—Sale of Yellow Oleomargarine.

Act No. 22 of the Public Acts of 1901 prohibiting the sale of oleomargarine except where it is "free from coloration or ingredient that causes it to look like butter," does not prohibit the sale of oleomargarine whose color is natural, genuine, and not an imitation, and the ingredients themselves naturally produce the color.

The term "ingredient," used in Act 22, Public Acts of 1901, does not refer to the ingredients essential to produce the article as defined by the legislature, but to an ingredient used to *produce* color.

Certiorari to the Circuit Court for Muskegon county, Fred J. Russell, Judge, to review an order denying the petition of John R. Bennett for mandamus to compel John M. Carr to issue a *warrant*. Order affirmed.

Charles A. Blair, Attorney General, and Cross, Lovelace and Ross, for relator and appellant.

Smith, Nims, Hoyt and Erwin for defendant and appellee.

Grant, J.: Relator is the inspector of the State Food and Dairy Department. On the 24th day of February, 1903, he made complaint before the defendant, a justice of the peace of the county of Muskegon, charging one Martin Aamondt with having sold one pound of oleomargarine contrary to act No. 22 of the Public Acts of 1901. The respondent refused to entertain the complaint and issue warrant, on the ground that the complaint stated no offense under the provisions of said act, and that said act is unconstitutional and void. Relator thereupon applied to the circuit court for the county of Muskegon for the *writ of mandamus* to compel the respondent to issue said warrant, and proceed with the examination. The circuit court sustained the action of the respondent, and the case is now before us for review upon *certiorari*.

The statute in question reads as follows:

"Section 1. No person, by himself or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter." The complaint charges Mr. Aamondt with unlawfully selling one pound of oleomargarine "made wholly or in part of fat, oil or oleaginous substance or compound thereof, as follows, to wit:

| | |
|--|----------------|
| Water | 11.75 per cent |
| Butter fat | 1.34 " " |
| Beef fat, lard and cottonseed oil..... | 79.24 " " |
| Salt and other mineral matter..... | 4.54 " " |
| Curd | 3.13 " " |

Said article, product or compound not being then and there butter produced from unadulterated milk or cream from the same, and being then and there in imitation of yellow butter produced from unadulterated milk or cream from the same, and not being then and there oleomargarine in a separate and distinct form and in such manner as would advise the consumer of its real character, free from coloration or ingredient that would cause it to look like butter, but that the said oleomargarine was then and there of a yellow color in imitation of butter, said color not being then and there produced by the addition of any artificial coloring matter, but said color being produced solely by the said ingredients therein contained, the said ingredients hereinbefore set forth having been selected and used in the manufacture of said oleomargarine in such manner and in such quantities and proportion as to produce the oleomargarine that was then and there in imitation of yellow butter produced from unadulterated milk or cream from the same, contrary to the form of the statute," etc.

The oleomargarine so purchased was manufactured in the city of Chicago, state of Illinois, by one Moxley, a resident of said city, and was sold by said Moxley to said Aamondt in the usual course of trade, and by said Aamondt was sold in the usual course of retail trade, in the same form and condition, and in the original package, in which it was received by Aamondt from Moxley.

It is conceded that this oleomargarine has a yellow color similar to butter, but the color is not produced by any artificial coloring substance or ingredient used for the purpose of coloration, but is produced solely by the selection and use, in proper proportions, of the substantial, recognized, legal and necessary ingredients of commercial oleomargarine.

Does the complaint state an offense covered by the statute? The answer depends upon the construction to be given to the statute. The relator contends that the statute covers all products which look like yellow butter, and that it is immaterial whether such color is produced by some ingredient introduced for the purpose of causing the product to look like butter, or whether such color is produced by authorized and legal constituent food ingredients. The respondent contends that the statute is aimed only at the use of ingredients used solely for the pur-

pose of producing the yellow color, and does not prevent the manufacture of an article whose color is natural, genuine and not an imitation. Penal statutes must be construed strictly and cannot be extended by construction beyond the intent of the act as expressed on its face. The conditions existing at the time the statute was enacted, and the mischief to be remedied, are important factors in construing penal statutes. Two acts covering the same subject must be construed as *in pari materia*, and if possible, effect given to both. These are elementary rules of construction. At the time the statute in question was enacted the only method in use in causing oleomargarine to look like yellow butter was the introduction of some extraneous coloring matter. This was the mischief to be remedied. We clearly so understood in *People v. Rotter*, 9 D. L. N. 284; 91 N. W. Rep. 167, where speaking through Chief Justice Hooker, we said of this statute: "The statute under consideration * * * does not prohibit sales of oleomargarine which is not tainted with the prohibited ingredient."

See also *People v. Phillips*, 9 Id. 393; 91 N. W. Rep. 616.

The legislature has defined oleomargarine which may be manufactured and sold in this State. Sec. 6, Act No. 147, Public Acts of 1899. It is conceded that the respondent has complied with this act. If we give the enlarged construction to the statute now in question, as urged by the relator, it follows that the legislature has prohibited the manufacture and sale of a valuable article of food, the natural color of which resembles yellow butter (itself almost universally colored by extraneous matter). The manufacturer of such a product, if he sold it at all, would be compelled to introduce some coloring matter so as to make it look unlike the yellow butter of commerce. These two statutes must be construed together. The article sold by the respondent is clearly authorized by the first act. The latter act does not in terms prohibit its sale and manufacture. It does prohibit the use of any substance for the sole purpose of producing yellow color. The use of such coloring matter was the sole mischief then known to exist, and the only danger to be apprehended and guarded against.

A similar statute was passed in New Jersey, and the like contention was made to support a conviction, and the court said: "To construe the statute so broadly would render it practically prohibitive of the sale of all oleomargarine; for, of course, the compound must derive color from its ingredients, and such a prohibition has manifestly not been declared."

Ammon v. Newton, 14 At. Rep. 610; 50 N. J. 548.

McCan v. Commonwealth, 48 At. Rep. 470; 198 P. A. St. 509.

Our statute is copied verbatim from that of Massachusetts. The Supreme Court of that State, in a case just decided, has held that the statute applies only to extraneous substances or ingredients which cause the product to look like butter, and not to cases where the ingredients themselves naturally produce the color.

Commonwealth v. Himberg, ———.

The Supreme Court of the United States so held in regard to the same statute.

Plumley v. Commonwealth, 155 U. S. 461.

The term "ingredient," used in the statute, does not refer to the ingredients essential to produce the article as defined by the legislature, but to an ingredient used to produce color. The maxim *noscitur a sociis* applies.

Under this disposition of the case it becomes unnecessary to discuss any constitutional question.

The order is affirmed.

The other justices concurred.

PEOPLE v. HARRIS.

(Opinion filed December 1, 1903.)

Food—Corn Syrups—Glucose.

1. Public Acts 1903, No. 123, forbids the sale of cane syrup or beet syrup mixed with glucose, unless the package containing the same be distinctly branded "Glucose Mixture," or "Corn Syrup," with the name and percentage of each ingredient contained therein plainly stamped thereon. *Held*, That a sale of syrup made of 90 per cent pure corn syrup and 10 per cent cane syrup, labeled "Victor Corn Syrup," and truthfully stating the ingredients composing it, is not in violation of the statute, in that it is not branded "Glucose 90 per cent, and cane syrup 10 per cent."

Exceptions from circuit court, Kent county; Willis B. Perkins, Judge.

Benjamin S. Harris was convicted of violating the "Act in relation to the sale of corn syrup" and brings exceptions. Reversed.

Respondent was prosecuted and convicted for a violation of Act No. 123 of the Public Acts of 1903, entitled "An act in relation to the sale of corn syrup," and reading as follows:

"Section 1. No person shall offer or expose for sale, have in his possession with intent to sell, any cane syrup, beet syrup, or glucose, unless the barrel, cask, keg, can, pail, or package containing the same be distinctly branded or labeled with the true and appropriate name; nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any cane syrup or beet syrup mixed with glucose unless the barrel, cask, keg, can, pail or package containing the same is distinctly branded or labeled 'Glucose Mixture' or 'Corn Syrup' in plain Gothic type not less than three-eighths of an inch square, with the name and percentage by weight of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain Gothic letters not less than one-quarter of an inch square. Each and every package of syrup either simple or mixed shall bear the name and address of the manufacturer. Such mixtures or syrup shall have no other designation or brand than herein required that represents or is the name of any article which contains a saccharine substance; and all brands or labels required shall be an inseparable part of the general or distinguishing label, and that the general or distinguishing label shall be that principal and conspicuous sign under which it is sold.

"Sec. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court."

The complaint charges him with the unlawful sale of a "two-pound can, two pounds, of a certain article, product and compound, to-wit: corn syrup, so-called, made wholly or in part of cane syrup and glucose as follows to-wit: Cane syrup ten per cent, and glucose ninety per cent, said can containing said article, product and compound sold as aforesaid not being then and there stamped, branded or stenciled with the name and percentage by weight of each ingredient contained therein, to-wit: Cane syrup ten per cent, glucose ninety per cent; but said article, product and compound sold as aforesaid was then and there stamped and branded as follows, to-wit: 'Cane syrup ten per cent, corn syrup ninety per cent,' against the form of the statute in such case made and provided, and against the peace and dignity of the people of the State of Michigan."

Respondent moved to quash the complaint and warrant for two reasons: (1) they charge no offense; (2) the act authorizes the use of the words "Corn Syrup," instead of Glucose in the statement of the ingredients placed upon the can. The motion was overruled and the case proceeded to trial upon the following agreed facts:

1. The respondent sold on October 12, 1903, at the city of Grand Rapids, Michigan, the can of Victor Corn Syrup in question.

2. The label on said can of syrup sold, as stated in the complaint, contains the formula of contents of said can as follows: "Corn syrup, ninety per cent; cane syrup, ten per cent;" and is not branded or labeled as the people claim it should be, "Glucose, ninety per cent; Cane Syrup, ten per cent."

3. The Victor Corn Syrup in question is in fact composed of ninety per cent syrup made from corn, commercially called Glucose or Corn Syrup, and ten per cent of cane syrup.

4. Glucose contained in the Victor Corn Syrup in question is in fact a pure syrup made entirely from corn.

5. Grape Sugar, commercially known as Glucose, either solid or liquid, is a generic name for starch sugar as distinguished from the cane sugar.

6. A simple beet syrup is evidently the same as the simple cane syrup.

7. Originally, Glucose, which was first made from grapes, was for the reason that starch sugars are identical with the sweet principle of grapes, termed, for a great many years, and until lately was known chemically and commercially as Grape Sugar.

8. Commercially, Glucose is now made in this country entirely from corn, although abroad it is still made from potatoes.

9. The consuming public does not understand that Glucose is a syrup made entirely from corn. On the contrary, it is claimed by the respondent that the public generally supposes Glucose to be an inferior product made from animal fat, or a product of the glue factory, while they do recognize corn syrup as being made from corn.

10. Glucose as made from corn and contained in Victor Corn Syrup in question, is entirely harmless and recognized generally by highest authorities as a valuable food product.

11. Glucose made from corn, in fact, costs at the present time, owing partially to cost of raw material, more to produce, and sells for more in the markets, than manufactured cane syrup.

The court directed a verdict of guilty.

Grant, J. Does the statute require respondent or manufacturers to state upon their labels that corn syrup consists of ninety per cent glucose? No such statute has come under the decision of other courts. It is a new question, and must be determined upon general principles of construction.

It is conceded that the label states the exact facts; that the article is made of ninety per cent pure corn syrup and ten per cent cane syrup; that it deceives no one; that Victor Corn Syrup is a valuable and pure article of food, and that the ingredient ninety per cent corn syrup "is entirely harmless and recognized generally by the highest authority as a valuable food product," whether it be called glucose or corn syrup. The term "glucose" is obnoxious to many, if not a majority of the public, and is misunderstood by them. They do not know that in this country glucose is now made entirely from corn, and that the terms glucose and corn syrup are commercially synonymous. This fact is known to the manufacturers and perhaps the dealers. A prejudice exists against the term "glucose" because that material can be manufactured from many substances, including sawdust. In Europe it is made mainly of potatoes. By many it is associated with a glue factory. In this country corn syrup and glucose are not only commercially synonymous terms, but it is stated by counsel for respondent that they are permitted to be so used in all the other states. We have not verified this statement, but as it is not challenged we assume it to be correct.

We have, therefore, a valuable and healthful product, made from two pure, valuable and healthful ingredients, advertised, and placed upon the markets for what it really is, without any deception, fraud or chance to injure the public in any way. Yet the contention on behalf of the people is that the legislature has enacted that in putting this product upon the market its manufacturers and sellers must attach to it a name obnoxious to the public, and in fact, calculated to deceive them. When it is claimed that such innocent acts are made *malum prohibitum*, there must be either an express provision of the statute so declaring, or the language of the statute must leave no other conclusion reasonable. This statute does not expressly require it.

The argument on behalf of the people is "that glucose made from corn is glucose, the simple syrup mentioned in and intended to be mentioned in said act." The further claim is "that had there been any intention on the part of the legislature to use the terms 'glucose' and 'corn syrup' interchangeably and as synonymous then the term 'corn syrup' would have been enumerated as one of the simple syrups." We do not think this reasoning at all conclusive. Prior to the enactment of this statute the law prohibited the sale of molasses, syrup or glucose unless distinctly branded or labeled with its true and appropriate name—or any mixture thereof, unless it was branded or labeled "glucose mixture," and the per cent in which glucose entered into its composition. C. L., sec. 5024. The present act which repeals the provisions of the former act expressly permits the mixture to be labeled "glucose mixture," or "corn syrup," and forbids mixtures or syrups to have any other designation than required in the act so far as such

designation "represents or is the name of any article which contains saccharine substance." It is a fair presumption that the legislature, in enacting this law, recognized the obnoxious character of the term "glucose" among the people, and permitted, and intended to permit, a mixture of corn syrup and cane syrup to be sold under the name of corn syrup. The title to the act provides for the sale of corn syrup, and in its body provides that when cane syrup is mixed with it, the manufacturers and dealers shall state the proportionate ingredients. The smaller amount of cane syrup used does not change the character of the general product, any more than salt changes the character of bread, or, sugar that of cake, and the act permits the sale of the mixture as corn syrup. Syrup, as defined by the United States Department of Agriculture, "is the product obtained by purifying and evaporating the juice of a sugar producing plant without removing any of the sugar." Syrup thus obtained from cane is cane syrup; syrup so obtained from sorghum is sorghum syrup, and syrup so obtained from corn is corn syrup. There is no reason why corn syrup should be labeled glucose, and until the legislature have so ordered in language susceptible of no other construction, the law must be held not to bear that construction.

Conviction reversed, and respondent discharged.

Hooker, C. J., took no part in the decision. The other justices concurred.

PEOPLE v. HINSHAW.

(Opinion filed January 5, 1904.)

Pure Food Law—Adulterated with Harmless Ingredients—Act 193, P. A. 1895, Construed.

The coloration of "Extract of Vanilla" with any substance to give it the appearance of greater strength is a violation of the pure food law, even though such coloring matter is harmless.

Act 193, P. A., 1895, as amended by Act 118, P. A. 1897, held constitutional.

Error to the circuit court for Saginaw county; B. A. Snow, judge.

Appeal of Emory H. Hinshaw from a conviction under the pure food law. Affirmed.

Charles A. Blair, Attorney General, and Frank A. Rockwith, Jr., and C. M. Browne, for the people.

Eugene Wilber, for respondent and appellant.

Respondent was prosecuted and convicted of the unlawful sale of "Extract of Vanilla, which was then and there adulterated within the meaning of act number 193 of the Public Acts of the State of Michigan of the year 1895, as amended by act number 118 of the Public Acts of 1897 in this, to wit: That said Extract of Vanilla was colored by the addition of a foreign coloring matter, to-wit: coal tar dye, whereby its inferiority was concealed, and whereby said Extract of Vanilla was made to appear better and of greater value than it really was."

Two errors are assigned—(1) that the court erred in instructing the

jury; (2) that the act is unconstitutional as repugnant to the fourteenth amendment of the constitution of the United States.

Grant, J.: I. The instruction complained of is as follows:

"Now before the inferiority of an article can be concealed it must be necessarily first ascertained as to whether or not there is an inferiority in the article. If it is an inferior article and that inferiority is concealed by reason of the addition of foreign substance in this vanilla, and you are satisfied from the proof beyond a reasonable doubt of the fact, then he would be guilty, although he had no knowledge as to the foreign substance being in the bottle."

It appears that no such claim was made on behalf of respondent upon the trial; no request was asked covering the points now raised. The only objections shown by the record to have been made are—*first*, that the title is not broad enough to cover the provisions in the amendment of 1897; *second*, that the legislature has no power to prohibit and punish acts in themselves harmless; *third*, that the act is unconstitutional.

Even in criminal cases it is the duty of counsel to call the attention of the court to the points on which an instruction is desired. *People v. Ezzo*, 104 Mich., 311.

We, however, are of the opinion that the information charges the coloration to make an inferior article appear better and more valuable than it really was, and is sufficient; and also that there was evidence to sustain the allegation. The State chemist testified that the effect of the coal tar dye was to make the article appear of greater value than it really is, and that the people would think it stronger than it really was: It is true, his testimony was weakened by cross-examination, but not sufficient to take the question from the jury—especially in view of the fact that no other purpose than to make the article appear better, is shown.

II. The use of coal tar dye being harmless, counsel for respondent insists that the case comes within the rule of the recent case of *People v. Jennings*, 94 N. W. R. 216; 10 D. L. N. 39. That case had not been decided when this case was tried. No such theory was advanced upon the trial. Even if it were, we, however, think the case is clearly distinguishable from *People v. Jennings*. The color given to lemon extract, which of itself is almost colorless, is no indication whatever of the strength of the extract or its value. Its color is a mere whim or caprice of the trade, and no more indicates the character and value of the extract than does the coloring matter, used to color butter, indicate its character and value. In this case vanilla resembles the color of the bean from which it is produced. Its strength and value are judged to some extent at least, under the evidence in this case, from its color. No other object is apparent from the use of the coloring than to make it appear of a quality better than it really is.

III. It is urged that the act is unconstitutional on account of the proviso "that nothing in this act shall prevent the coloring of pure butter." This act is similar in its provisions to that involved in *People v. Rotter*, 91 N. W. R. 167; and *People v. Phillips*, Id. 616. The constitutionality of such acts was there sustained, and a discussion is unnecessary. *Capitol City Dairy Co. v. Ohio*, 183 U. S. 238, 246, is decisive of the question.

The conviction is affirmed.

The other justices concurred.

The Pratt Food Company,

vs.

Arthur C. Bird, Dairy and Food
Commissioner of the State of Michigan.

Before Blair, P. J., and
Montgomery, Hooker and
Moore, J. J.

Montgomery, J.

The bill in this case is filed to restrain the defendant, his clerks and employes, from writing, printing, issuing, publishing or sending out any bulletin, writing, publication or notice, to the effect that complainant's preparations sold as Pratt's Food for Horses and Cattle, Pratt's Poultry Food, and Pratt's Animal Regulator, or either of them, are not licensed under Act No. 12 of the Laws of 1905, and warning the public against buying or selling these preparations.

The bill sets out that the defendant asserts and claims that these preparations come within the terms of the act, and that unless restrained by injunction he will so assert by bulletins issued to the trade, and by this method intimidate dealers and prevent their purchasing complainant's products. (We are stating simply the substance of the averments in brief). It is also asserted that the effect of such bulletins will be to destroy and ruin the complainant's trade and work irreparable injury.

Upon the hearing below the bill was dismissed, and the complainant appeals. Three questions are presented upon the record, first, whether in view of the case complainant is entitled to the remedy here invoked; second, whether Act No. 12 of the Public Acts of 1905 is constitutional; third, whether if it be constitutional the complainant's products come within the terms of the statute.

1. The statute in question is an amendment of Act No. 211 of the Public Acts of 1893, entitled "An Act to provide for the appointment of a Dairy and Food Commissioner, and to define his powers and duties and fix his compensation," and by section 18 of the act it is provided that "Any manufacturer, company, person or persons who shall sell, offer or expose for sale or for distribution, in this State, any concentrated commercial feeding stuff used for feeding live stock, shall furnish with each car, or other amounts shipped in bulk, and shall affix to every package of such feeding stuff, in a conspicuous place, on the outside thereof, a plainly printed statement, clearly and truly certifying the number of net pounds in the car or package sold or offered for sale, the name or trade-mark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis, stating the percentages it contains of crude protein, crude fibre, nitrogen—free extract and ether extract, all constituents to be determined by the methods adopted by the association of official agricultural chemists. Whenever any feeding stuff is sold at retail, in bulk or in packages belonging to the purchaser, the agent or dealer shall furnish to him a certified copy of the chemical analysis named in this section. The term concentrated commercial feeding stuffs as used in this act shall include linseed meal, cotton seed meal,

pea meals, cocoanut meals, gluten meals, oil meals of all kinds, gluten feeds, maize feeds, starch feeds, mixed sugar feeds, hominy feeds, rice meals, oat feeds, corn and oat feeds, meat meals, dried blood, clover meals, mixed feeds of all kinds, slaughter house waste products; also all condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended for feeding to domestic animals. . . ." A penalty is provided for the violation of this provision.

It is strenuously insisted by the Attorney General that if it be conceded that the complainant's products do not come within the inhibition of this statute, yet no remedy by injunction exists, for the reason that the effect of issuing an injunction is to restrain the prosecution of a criminal proceeding. Numerous cases are cited, among them *Arbuckle v. Blackburn*, 113 Fed. Rep. 625, *State v. Wood*, 155 Mo. 425, and *Predigested Food Co. v. McNeal*, 1 Oh. N. P. 266.

In so far as these cases lay down the rule that a court of equity will not interfere to restrain a public officer from invoking the criminal law and instituting a prosecution for a violation of a statute they have our full approval. A court of equity will not transfer to its own jurisdiction the trial of a criminal case, and this though the prosecution may fall with some hardship upon the accused party. Nor, as a general proposition, will a court interfere to restrain the publication of a libel.

But we hold in *Beck v. Railway Teamsters' Protective Union*, 118 Mich. 497, that injunction will lie to restrain a combination of persons from acts which tend to ruin complainant's business by bringing to bear upon his customers intimidating and coercive means. The principle which should rule the present case is identical. If the acts which are threatened are unlawful it cannot be doubted that placing in the hands of every dealer in the State a bulletin which in effect threatens them with prosecution in case they make use of these products in the form in which they are lawfully sold to them would be to absolutely exclude complainant's business from the State. The case presented is very similar in this aspect to that of *American School of Magnetic Healing v. McAnnulty*, 187 U. S. 94, which case involved the right of the Postmaster General to exclude the complainants from the use of the United States Mails. An order had been made excluding complainants from the use of the mails. The court interfered and held that such order was a violation of the property rights of the persons affected and granted relief.

2. Is the law constitutional?

It is claimed that the law is unconstitutional in that it violates Section 20 of Article IV of the constitution, which provides that no law shall embrace more than one object, which shall be expressed in its title.

It is established by our decisions that if what is introduced by way of an amendment to an act might have been incorporated in the act under the original title there is no violation of this section. *People v. Gadoway*, 61 Mich. 285; *Attorney General v. Bolger*, 128 Mich. 355.

The question is therefore whether under the original title a provision fixing a standard of pure food and providing means to prevent deception in the sale of such food is within the title of an act to pro-

vide for the appointment of a Dairy and Food Commissioner and to define his powers and duties and fix his compensation. We think the title is within our previous decisions sufficient. It is obvious to one reading this title that there must have been imposed upon the commissioner certain powers and duties to make his Department of any value to the State, and furthermore that these powers and duties must have relation to something. It is equally obvious that the relation of these powers and duties must be to the subject which is brought within the Department that is created, viz., the Dairy and Food Department.

The title is very similar to that which established the Insurance Bureau. In *Connecticut Mutual Life Ins. Co. v. State Treasurer*, 31 Mich. 6, it was held that a title which read "An act to establish an Insurance Bureau" was sufficiently broad to cover any pertinent regulations respecting the bureau's course of action towards those engaged in insurance, and any appropriate provisions for prescribing the duty due from the insurance companies to the State in the matter of taxation, without violating the constitutional provision.

3. The question of more difficulty is the question of fact as to whether the preparations of complainant are concentrated commercial feeding stuffs as defined by the act cited above.

It is true the testimony shows that upon each of the labels which accompanied Pratt's Food for Horses and Cattle was the statement: "Pratt's Food is a regulator, to be used according to directions, and is not sold as a feeding stuff, nor is it to be fed in place of grain or any other feed." But in addition to claiming medicinal properties for the food it was also stated how it should be used to fatten and improve stock. It was stated that "It fattens both cattle and hogs quickly, makes them grow larger and healthier and makes their meat tender, more juicy and better eating." It also stated that for horses it "produces bone, muscle and better staying powers; improves the wind."

When this statute was enacted commercial feeding stuffs were on the market and this fact must have been known to the Legislature.

In employing the broad language "All condimental stock foods, patented and proprietary stock foods, claimed to possess nutritive properties and all other materials intended to cover all preparations for which the claim of nutritive qualities was made. Complainant's preparations come within this language.

Similar representations were made in the labels of other preparations.

We are of the opinion that the Circuit Judge was right in holding that all these preparations were within the statute.

The decree is affirmed with costs.

Pierre Viaus Maple Company, Complainant, v. Arthur C. Bird, Dairy and Food Commissioner, and Joseph Schnitzer, Inspector of the Dairy and Food Department, Defendants. Before Grant, C. J., Blair, Montgomery, Ostrander and Hooker, JJ.

Complainant is the manufacturer of a brand of syrup known as the "Pierre Viaus Pure Canadian Maple Syrup and Cane Syrup," the trademark being the letters P. V. The bill alleges that the Canadian Pure Maple Syrup exceeds the amount of Cane Syrup. It sets forth efforts made with the Pure Food Commission to agree upon a label which shall comply with the law, the failure of these negotiations, the representations made to the trade by the defendants that the sale of this syrup is illegal, and the injurious effect upon the complainant's business, and prays that the defendants be restrained from in any manner interfering with its business. To this bill of complaint the defendants demurred upon the ground that the syrups mentioned in said bill of complaint are not labelled as required by the laws, of this State. The demurrer was overruled. and the defendants have appealed.

Grant, C. J.

It is urged by the Attorney General that the sale of this mixture is in violation of section 5007 of the Compiled Laws, reading as follows:

"That it shall be unlawful for any person, dealer, firm, manufacturer or corporation to manufacture and sell, or offer for sale, any maple sugar, maple molasses or maple syrup that is in anywise adulterated with common sugar, beet sugar, glucose or any other foreign substance without distinctly marking, stamping or labeling the articles or the package containing the same with the true and appropriate name of such article and the percentage in which common sugar, beet sugar, glucose or any other foreign substance enters into the composition of the same."

It is urged by the complainant that the case falls within Act 193, Public Acts of 1895, known as the Pure Food Law, and entitled, "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of articles of food and drink."

Sec. 1 (C. L. 5010) of the act prohibits the sale or having in possession with intent to sell any article of food which is adulterated within the meaning of the act.

Sec. 2 (C. L. 5011) defines the term "food" to include all articles used for food or drink.

Sec. 3 (C. L. 5012) states what articles shall be deemed to be adulterated. The section closes with the following proviso:

"Provided further, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definitions fourth and seventh of this section."

The court held that this syrup came within the Pure Food Law (Act 193), and not under the act prohibiting the adulteration of maple sugar, etc., and that it came within the proviso above quoted.

We think the court was in error. The act in regard to the manufacture and sale of maple sugar is complete in itself, and covers the entire subject. It was intended to prohibit the manufacture and sale of maple sugar under any name without labeling the product with the true and appropriate name, stating thereon the percentage of any other ingredient used in its manufacture. The title of the act is "An act to prohibit the adulteration of maple sugar, maple molasses and maple syrup." The word "adulteration" in this statute means the mixture of any foreign substance, wholesome or unwholesome, with maple sugar. The evident purpose of the statute is to compel all persons manufacturing or selling maple sugar to inform the public not only of what the product is composed, but the proportions of each article used in the manufacture.

Decree reversed, and bill dismissed with costs of both courts.

ABSTRACT OF LAWS.

The following is but a brief synopsis of the Dairy and Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulation, and dealers are advised to examine the laws carefully and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts by any person, firm or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of this act is deemed a sale.

Under this statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE.

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
4. If it is an imitation of or is sold under the name of another article;
5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;
6. If it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter which may be colored;
7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;
2. They must contain nothing injurious to health;
3. They must not be sold in imitation of, or under the name of another article;
4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;
5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coined name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound, and lard compound.

DAIRY LAWS.

UNWHOLESOME MILK AND CREAM.

Whenever it is determined by the Dairy and Food Commissioner, his deputy or inspectors, that any person is using, selling or furnishing to any skimming station, creamery, cheese factory, condensed milk factory, milk depot, farm dairy, milk dealer, the retail trade, or to any consumer of milk, any impure or unwholesome milk or cream, caused by the unsanitary or filthy condition of the premises where cows are kept, or by the unsanitary or filthy care or handling of the cows, the use of unclean utensils, unwholesome food, or from any other cause, the person so offending shall be notified and warned by the Commissioner, his deputy, or inspectors not to use, sell or furnish such milk or cream at any of the places, or to any of the persons above mentioned. A failure to obey such notice and warning and the continued sale of such milk is made a misdemeanor, punishable by fine or imprisonment or both.

SANITARY CONDITION.

Whenever it is determined by the Dairy and Food Commissioner that unsanitary conditions exist in the operation of any skimming station, creamery, cheese factory, condensed milk factory, milk depot, or farm dairy, the proprietor or manager of the same, shall be notified and warned by the Commissioner, his deputy or inspectors, to place such skimming station, creamery, etc., in a sanitary condition. A failure to obey such notice and warning is made a misdemeanor, punishable by fine or imprisonment or both.



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